

**NATIONAL
MARINE OIL SPILL
CONTINGENCY PLAN**

**Australia's
“National Plan to Combat
Pollution of the Sea by
Oil and Other Noxious and
Hazardous Substances”**

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ABBREVIATIONS

ADIOS	Automated Data Inquiry For Oil Spills
AIP	Australian Institute Of Petroleum
AMOSC	Australian Marine Oil Spill Centre
AMOSPlan	Australian Industry Cooperative Oil Spill Response Arrangements
AMR	Australian Maritime Resources
AMSA	Australian Maritime Safety Authority
ATC	Australian Transport Council
AusSAR	Australian Search And Rescue, Amsa
CASA	Civil Aviation Safety Authority
ChemPlan	National Marine Chemical Spill Contingency Plan
COWG	Chemical Operations Working Group
EA	Environment Australia
EARL	East Asia Response Limited
EEZ	Exclusive Economic Zone
EMA	Emergency Management Australia
EPBC Act	<i>Environment Protection And Biodiversity Conservation Act 1999</i>
EPG	Environment Protection Group, Amsa
EPS	Environment Protection Standards, Amsa
ESC	Environmental And Scientific Coordinator
EWG	Environment Working Group
FAO	Finance And Administration Officer
FWADC	Fixed Wing Aerial Dispersant Capability
GBRMPA	Great Barrier Reef Marine Park Authority
IAP	Incident Action Plan
IC	Incident Controller
ICC	Incident Control Centre
IGA	Inter-Governmental Agreement (On The National Plan To Combat Pollution Of The Sea By Oil And Other Noxious And Hazardous Substances)
IMO	International Maritime Organization
IMT	Incident Management Team
INMARSAT	International Maritime Satellite
LO	Logistics Officer
MAC	Mutual Aid Contact
Marpol 73/78	International Convention For The Prevention Of Pollution From Ships
MLO	Media Liaison Officer
MO	Maritime Operations, Amsa
MOSES	Marine Oil Spill Equipment System

MPC	Marine Pollution Controller
National Plan	National Plan To Combat Pollution Of The Sea By Oil And Other Noxious And Hazardous Substances
Nm	Nautical Mile
NPMC	National Plan Management Committee
NPOG	National Plan Operations Group
NRT	National Response Team
NT	Northern Territory
OCS	Offshore Constitutional Settlement
OO	Operations Officer
OOWG	Oil Operations Working Group
OPRC	International Convention On Oil Pollution Preparedness, Response & Cooperation
OSCC	On Scene Casualty Coordinator
OSRA	Oil Spill Response Atlas
OSRICS	Oil Spill Response Incident Control System
OSRL	Oil Spill Response Limited
OSTM	Oil Spill Trajectory Model
P&I	Protection And Indemnities
PO	Planning Officer
POLREP	Pollution Report
REEFPLAN	Marine Pollution Contingency Plan For Great Barrier Reef
SITREP	Situation Report
SMPC	State Marine Pollution Committee
UHF	Ultra High Frequency
UNCLOS	United Nations Convention On Law of the Sea
VHF	Very High Frequency

1 ABOUT THIS DOCUMENT

The incident involving the grounding of the *Oceanic Grandeur* in the Torres Strait in 1970 led to the development of a national capability to ensure that Australia would be prepared to respond to ship sourced pollution incidents. This document relates to the oil spill component of **The National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (National Plan)**.

1.1 Background

The National Plan has been in operation since 1973 and brings together the combined resources of the Commonwealth, State and Northern Territory (State/NT) Governments, the oil, shipping and exploration industries to provide a level of preparedness to the threat posed to the marine environment by oil and chemical spills.

The National Plan sets out a clear definition of the responsibilities of the major participants, the Commonwealth, States/NT and industry. This is provided in a set of Commonwealth/State/NT arrangements by way of an Inter-Governmental Agreement (IGA) (Appendix 1), which also details such matters as divisions of responsibilities, contingency planning, access to Commonwealth equipment and the management, and control of financial affairs.

Based on these arrangements the prescribed role of the Commonwealth, through the Australian Maritime Safety Authority (AMSA), is one of co-ordination and the provision of technical advice, logistic and maintenance support, training, materials and equipment. Additionally, AMSA and the Australian Institute of Petroleum (AIP) have entered into an agreement for mutual assistance and access to the National Plan and Australian Marine Oil Spill Centre (AMOSC) equipment stockpiles.

The national contingency plan hierarchy outlined in Figure 1 consists of national marine oil and marine chemical spill plans, REEFPLAN, the marine pollution contingency plan for the Great Barrier Reef Marine Park and State/NT, port and industry plans.

This Plan prescribes procedures and provides information required to implement the National Plan. At any time one of the plans outlined in Figure 1 are activated, this will activate National Plan arrangements.

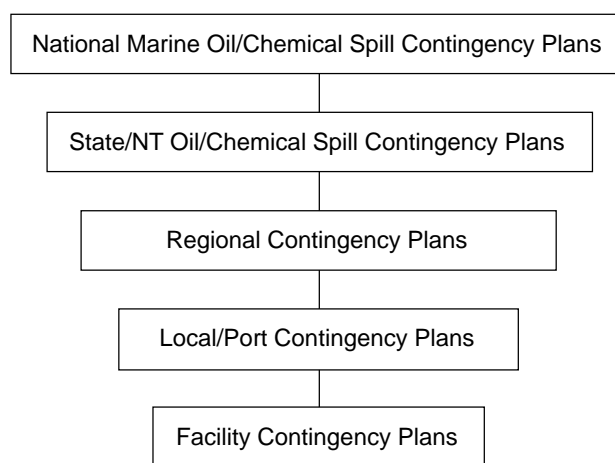


Figure 1 - National Plan Contingency Plan Hierarchy

1.2 Threat

Australia depends almost exclusively on shipping to move its exports and imports and has, in terms of tonnes of cargo shipped and kilometres travelled the fifth largest shipping task in the world.

There are about 12,000 ship visits to Australia each year. Ship-sourced pollution may result from either accidental or illegal operational discharges. Accidental discharges may involve escape of bunker fuel or oil cargo resulting from a marine incident. The threat is largely a function of the types of oil cargo and bunkers carried, the degree of navigational hazards, the weather and shipping density.

1.3 Aim of the plan

The aim of this document, the National Marine Oil Spill Contingency Plan, is to outline the national arrangements for responding to oil spills in the marine environment, with the aim of protecting it from oil pollution or, where this is not possible, to minimise its effects.

1.4 Scope of plan

The National Marine Oil Spill Contingency Plan outlines combined government and industry arrangements designed to allow a rapid and co-operative response to marine oil spills occurring within the area defined by this Plan. It is complemented by other Government and industry contingency plans prepared at Commonwealth, State/NT, regional, port and facility levels. Matters of detail are contained in local, site specific, contingency plans. This Plan co-ordinates the provision of national and international support.

1.5 Geographical area

The geographical area covered by the National Marine Oil Spill Contingency Plan is the Australian Territorial Seas, including off-shore islands and territories, the Exclusive Economic Zone (EEZ) and the High Seas where an oil spill has the potential to impact on Australian interests as detailed in Figure 2.



Figure 2 - Geographical Area (EEZ)

1.6 Designed spill size

The National Plan is established to respond to oil spills of any size in Australian waters. For planning and operational reasons and based on the experience of spills in Australia and international criteria, a designed spill size of 21,000 tonnes exists. This has been determined by National Plan stakeholders taking into account current ship type and equipment holdings and endorsed by Australian Transport Council (ATC) as the appropriate level for which to plan equipment and other resource requirements. Additionally, arrangements are in place to augment this capacity from overseas equipment stockpiles should any incident exceed Australia's resource capability.

1.7 Chemical and other incidents

Incidents involving pollution by other substances could fall into two categories:

- (i) chemicals released at sea from a chemical tanker's cargo tank as a result of collision, grounding, fire, operational or illegal discharge.
- (ii) packages or containers lost at sea being washed ashore or sinking to the sea bed.

Procedures dealing with the response to chemicals incidents are outlined in the National Marine Chemical Spill Contingency Plan (ChemPlan).

1.8 Legislation

1.8.1 International Conventions

Australia has been a member of the International Maritime Organization (IMO) since its inception, and was active in the development and implementation of the five IMO Conventions which specifically address pollution from ships. These conventions are implemented in Australia by the "Protection of the Sea" package of legislation listed in 1.8.3 below.

1.8.2 Jurisdiction

An agreement between the Commonwealth and the States/NT, known as the Offshore Constitutional Settlement (OCS) effectively gives the States/NT jurisdiction over the Territorial Sea and the Commonwealth jurisdiction over the High Seas. One feature of the OCS was recognition by the States/NT that a mechanism was required to enable Australia to become a party to key international maritime conventions without the need for the legislation in every Australian jurisdiction to be in compliance at the time of ratification. The concept of the "savings clause" was introduced whereby Commonwealth law giving effect to the Conventions would apply in all jurisdictions, but would "step back" if and when a State/NT enacted the provisions itself.

With Australia's accession to the United Nations Convention on the Law of the Sea (UNCLOS), the Commonwealth's jurisdiction extends to the EEZ and the Territorial Sea extends to 12 nautical miles (Nm) from the coastline (Figure 1). However, the States/NT jurisdiction does not extend beyond the previous Territorial Sea limits of three Nm.

1.8.3 National Legislation

Act	Objectives	Complementary State/NT legislation
<i>Protection of the Sea (Civil Liability) Act 1981</i>	Implements International Convention on Civil Liability for Oil Pollution Damage 1992, requiring the owners of oil tankers to have insurance for pollution damage	No
	Cost recovery for AMSA National Plan activities	Yes
<i>Protection of the Sea (Powers of Intervention) Act 1981</i>	Implements International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and the 1973 Protocol to that Convention.	Yes
	Sets out intervention powers for territorial waters	Yes
<i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983</i>	Implements International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) setting operational and construction standards for ships to prevent pollution.	Yes
<i>Protection of the Sea (Shipping Levy) Act 1981</i> and <i>Protection of the Sea (Shipping Levy Collection) Act 1981</i>	Imposes levy on shipping to fund Australia's National Plan and sets out how the levy is collected.	No
<i>Protection of the Sea (Oil Pollution Compensation Fund) Act 1993,</i> <i>Protection of the Sea (Oil Pollution Compensation Fund - Customs) Act 1993,</i> <i>Protection of the Sea (Oil Pollution Compensation Fund - Excise) Act 1993,</i> <i>Protection of the Sea (Oil Pollution Compensation Fund - General) Act 1993</i>	Implements International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992 providing compensation for oil spill damage above the limits available under the Civil Liability Convention, funded by levies on oil companies.	No
<i>Australian Maritime Safety Authority Act 1990</i>	Sets out functions of the Australian Maritime Safety Authority, including "the combating of pollution in the marine environment"	No
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Provides for protection of the environment and the conservation of biodiversity, and for related purposes. <i>Note: This Act only applies where response action is taken that is not in accordance with any contingency plan in place under National Plan arrangements.</i>	No

2 PREPAREDNESS

2.1 Plan support

As outlined in 1.1, the National Plan is underpinned by the IGA. The IGA aims to:

- provide a basis for continued Commonwealth, State and NT government commitment to and support for the National Plan;
- provide a stable reference point whereby those unfamiliar with the Plan can readily ascertain the obligations placed on their organisation; and
- be used to set out agreed minimum activities, allowing participants' performance against those minimums to be more readily assessed.

The IGA ensures that the national approach to preparedness and response to oil and chemical spills in the marine environment is continued and strengthened. It provides a mechanism to ensure decision making under the National Plan is co-operative and that the obligations of all parties are met.

The IGA also outlines a management structure for the National Plan that covers all elements of the plan, including the National Marine Oil Spill Contingency Plan. The management structure consists of:

2.1.1 Australian Transport Council

The Australian Transport Council (ATC), made up of Commonwealth, State and Territory Ministers with responsibility for transport, is the Ministerial body responsible for National Plan matters.

2.1.2 National Plan Management Committee

Under the IGA a National Plan Management Committee (NPMC) has been established to provide advice to the ATC on the strategic, policymaking and funding direction for the National Plan.

2.1.3 National Plan Operations Group

Under the IGA, the Parties have also established a National Plan Operations Group (NPOG) to support the NPMC by considering the overall operational aspects of the National Plan.

NPOG is further supported by three working groups:

- The Oil Operations Working Group (OOWG) which considers issues such as the National Marine Oil Spill Contingency Plan, oil spill response equipment and training, fixed wing aerial dispersant spraying and contingency plan audits.
- The Chemical Operations Working Group (COWG) which considers issues such as ChemPlan, chemical response training and chemical response equipment. _ The Environment Working Group (EWG) which addresses both research and development and the environmental and wildlife interests of all the parties to the National Plan.

2.1.4 Australian Maritime Safety Authority (AMSA)

Under the IGA, as the managing agency for the National Plan, the Australian Maritime Safety Authority (AMSA) is responsible for maintaining the National Marine Oil Spill Contingency Plan. AMSA responsibilities also include acting as both Statutory and Combat Agencies for Commonwealth waters as described in the IGA. During incidents in State/NT waters AMSA provides support to State/NT Statutory and Combat Agencies.

2.1.5 State/NT Responsibilities

Under the IGA a Statutory Agency in each State/NT is responsible for coordinating the local administration and operation of the National Plan. This may be done in consultation with a State/NT Committee and with due consideration to the relevant State/NT emergency management arrangements.

2.1.6 National Plan Key Contacts

Contact details for key elements of the National Plan are provided in Appendix 2

2.2 Division of responsibility

2.2.1 Statutory/Combat Responsibilities

The IGA (Appendix 1) defines authorities with responsibility for combating oil spills within harbours, onshore, in the territorial seas and on the high seas around Australia. This includes those responsibilities of Statutory and Combat Agencies.

It should be noted that in some cases the Statutory and Combat Agencies will be the same entity.

Responsibilities for responding to oil spills within harbours, on shore, in the territorial seas and on the high seas around Australia are shared between AMSA, State/NT Governments, Port Authorities and Corporations and the oil industry. In relation to the offshore territories of Cocos Keeling, Christmas, Norfolk, Heard, Macquarie, McDonald and Ashmore Islands and the reef territories, the Commonwealth Government will assume the role of a 'State' Government. The New South Wales Government accepts responsibility for Lord Howe Island. Responsibilities are given in detail below and are summarised in Figure 3.

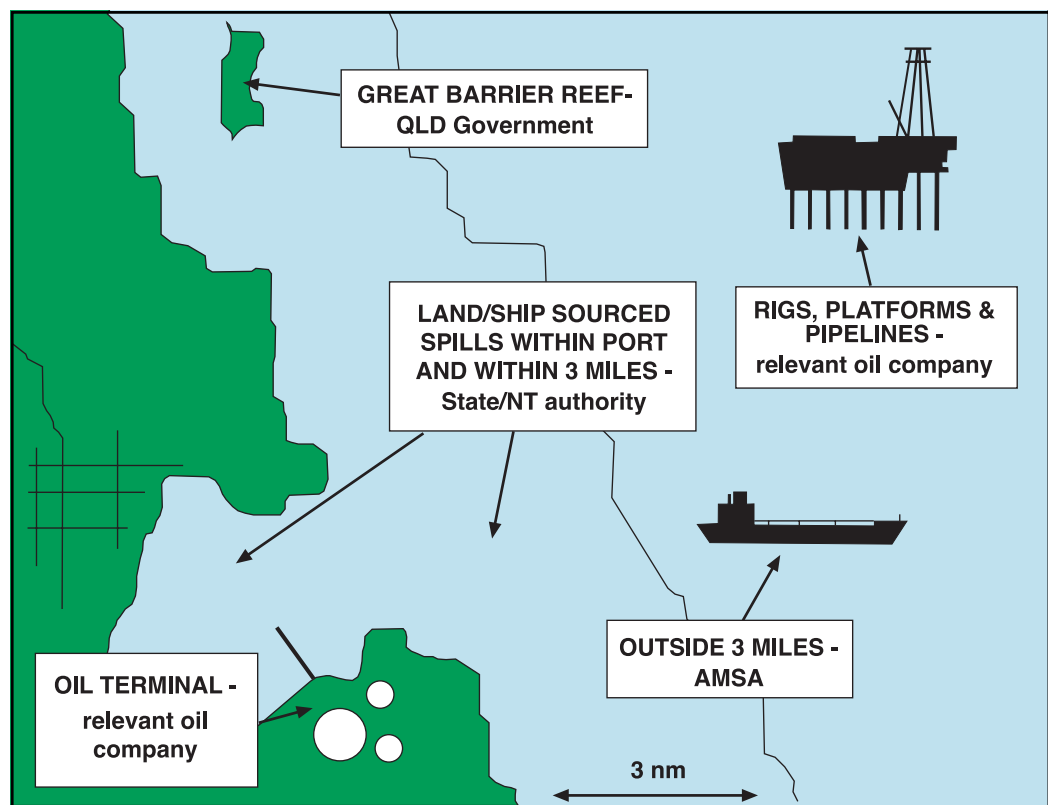


Figure 3 - Divisions of Responsibility

2.2.2 Statutory Agencies

In accordance with the IGA (and the Offshore Constitutional Settlement (OCS) jurisdictional arrangements), responsibility for overseeing response action for oil spills, other than those from offshore petroleum operations, is as follows:

Within the three nautical mile (Nm) coastal waters and in foreshore areas - the State/NT Government's designated Statutory Agency.

Outside the three nautical mile (Nm) coastal waters - AMSA, as the Commonwealth Statutory Agency.

The Statutory Agency is responsible for the institution of prosecutions and the recovery of clean up costs on the behalf of all participating agencies.

2.2.3 Combat Agencies

Combat Agencies for responding to marine oil spills in various locations are as follows:

At oil terminals	At oil terminals - the relevant oil company or terminal operator using industry arrangements as required such as the Australian Industry Cooperative Oil Spill Response Arrangements (AMOSPlan) mutual aid arrangements through the Australian Marine Oil Spill Centre (AMOSOC). Should a situation develop where the necessary response is beyond oil company or terminal resources, responsibility for control will transfer to the Statutory Agency, with response assistance from other National Plan stakeholders as required. Statutory Agencies should enter into predesignated response arrangements with oil terminal operators which clearly specify the agreed division of responsibilities and terms and conditions for transferring control
In ports (other than at terminals within a port)	The port operator or responsible State/NT authority as specified in the relevant contingency plan, with response assistance from other National Plan stakeholders as required.
Within the three Nm coastal waters	The responsible State/NT Statutory Agency with response assistance from other National Plan stakeholders as required.
Beyond the three Nm coastal waters	The Commonwealth via AMSA, with response assistance from other National Plan stakeholders as required. In incidents close to shore when oil is likely to impact the shoreline, the State/NT via the Statutory Agency will be the Combat Agency for protecting the coastline, while AMSA assumes responsibility for ship operational matters, eg containing the spill within the ship, organising salvage, etc.
In the REEFPLAN area of the Great Barrier Reef	The Queensland Government via the Queensland National Plan State Committee, with assistance from the National Plan and industry as required.
For spills emanating from offshore petroleum operations.	The relevant company with assistance from the Statutory Agency and other National Plan stakeholders as required.

The Combat Agency shall as soon as possible undertake preventive and clean up action or may request another agency to act on its behalf.

Regardless of which agency has lead responsibility, other agencies shall assist as far as is practical, in accordance with requests from the Combat Agency.

In circumstances where the incident has exceeded, or is likely to exceed, the effective response capacity of the Combat Agency, or the response is not being conducted effectively, the Statutory Agency may assume control of the response.

A response by a Combat Agency does not in any way indicate an admission of liability for the source of the spill or for acceptance of the costs of a spill. Liability for a spill is to be determined by due legal proceedings.

2.3 Cross border incidents

In those incidents close to State/NT borders, it is essential that high-level consultation and co-operation between the two Statutory Agencies, with the objective to ensure a clear delineation of responsibility for the response.

It should be noted that some States have formal arrangements by way of Memorandum of Understandings dealing with cross border incidents.

2.4 Response policy

The primary aims of an oil spill response are to:

- Protect human health and safety.
- Minimise environmental impacts.
- Restore the environment, as nearly as is practicable, to pre-spill conditions.

The environmental impact of an oil spill can be minimised by good management and planning as well as the response actions put into effect by the responsible authority. Such actions will largely depend on several factors:

- The type of oil(s) involved.
- The size of the spill.
- The location of the spill.
- Prevailing sea and weather conditions at the spill site.
- The environmental sensitivity of the coastline/site impacted.

2.5 Levels of response

Under National Plan arrangements, oil spills and the response they require are categorised into three 'Tiers'. The concept of a Tiered response links the credible spill scenarios to attainable scales of response and, by linking joint arrangements, enables escalation from one Tiered response to another, should the need arise. It is a practical method of planning a spill response in terms of required resources.

The National Plan's three levels of tiered response are based on the following spill scenarios:

Tier 1 - up to 10 tonnes – a small spill requiring a local response. The Combat Agency will generally be able to respond to and clean-up a spill utilising local resources. In cases where additional resources are required, these will generally be available from the local port authority or by utilising National Plan resources in the region or from adjacent industry operators under mutual aid arrangements.

Tier 2 - between 10 and 1000 tonnes – a medium spill. The resources of the Combat Agency will need to be supplemented by other resources from intra-State and possibly interstate. Interstate resources will be facilitated by the Statutory Agency through EPG, AMSA.

Tier 3 - above 1000 tonnes – a large spill requiring national assistance. The Combat Agency will require local, regional, national and possibly international assistance. Interstate and international resources will be facilitated by the Statutory Agency through EPG, AMSA.

2.6 Oil industry arrangements

Combat Agency responsibilities undertaken by the Australian oil industry are set out in the IGA. In general, at oil terminals the relevant oil company or terminal operator has Combat Agency responsibility. Should a situation develop where the necessary response is beyond the oil company or terminal resources the Combat Agency responsibility will transfer to the Statutory Agency. For offshore petroleum operations, the relevant oil company has Combat Agency responsibility, with assistance as required from the Statutory Agency.

The oil industry operates AMOSC, a subsidiary of AIP. AMOSC is located in Geelong and provides Tier 3 response, training and other services. The Marine Oil Spill Equipment System (MOSES) listing maintained by AMSA (Section 4.4 and Appendix 3) includes details of AMOSC and other industry owned equipment. Under an agreement between AMSA and AMOSC, AMOSC and other industry resources (both equipment and personnel) can also be made available to the Commonwealth and States/NT for incidents not involving companies that are subscribers to AMOSC. Access to this equipment is available through Environment Protection Group (EPG), AMSA.

The oil industry also operates a mutual aid plan, AMOSPlan. AMOSPlan recognises that the response effort for an oil spill at an industry facility may require resources beyond those of the company itself and allows mutual aid to be provided from other industry company resources. AMOSPlan is administered by AMOSC and the legal arrangements facilitating AMOSPlan are through the AMOSC hiring agreements. To activate AMOSPlan, a request for assistance is made from the Mutual Aid Contact (MAC) of the affected company to the MAC of a company that is able to provide assistance. Under AMOSPlan arrangements, the MAC is expected to liaise with the local authorities to agree and maintain effective plans for response to an oil spill.

Even though the Statutory Agency may take over the Combat Agency responsibility from the affected company, industry resources will continue to be available to the response.

Industry Advisers have been nominated from each AMOSC subscriber company. During an incident involving a particular company, the Industry Adviser of the affected company provides a direct high-level linkage to the response organisation.

Industry personnel are also members of NPMC, NPOG and the respective State/NT Committees.

2.7 Risk assessment

The location of National Plan resources is based on a risk profile around the coast of pollution of the sea by discharges of oil or chemicals from ships.

The following risk factors are recognised as important in Australian waters:

- The risk of collision.
- The risk of grounding.
- Hazards to navigation.
- Seaworthiness of vessels.
- Negligence and competence of the owner/operator, Master or crew.
- Aging of the fleet of vessels at sea, chemical, bulk and container.
- Size/type of vessel.
- Stowage and control of cargoes.
- Type/amount of chemical(s) and oil carried.
- Traffic density.
- Environmental factors including tidal flow and weather etc.

The risk assessment reports by location on the level of risk of pollution of the sea, coastline and ports of Australia by oil and other noxious and hazardous substances, taking in to account:

- environmental sensitivity;
- industries (eg fishing, tourism) which would be most adversely affected ecologically or financially by a spill;
- commercial cargo shipping size, frequency, trading patterns and amounts of oil carried as bunker fuel;
- oil/chemical tanker frequency, sizes, shipping patterns and quantities shipped;
- properties of oil/chemicals shipped as cargo;
- type, density and movement of shipping including concentration of fishing vessels and tourist vessels;
- areas that pose a high level of difficulty to safe navigation;
- changes in the operation and construction of ships during the 1990's, such as the introduction of double hulls, amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), International Safety Management Code, etc;
- amount and properties of oil produced offshore and transported by pipeline;
- location of offshore production and pipeline facilities;
- extent of offshore exploration drilling; and
- future trends, including proposed new ports and projected changes to trading patterns

As part of the risk assessment waters around Australia are divided into regions and each region further divided into near-shore, intermediate and deep sea subregions. The Risk Index for each subregion was determined by combining the predicted frequency and average size of spills from all sources in each subregion. Additionally this includes a simple environmental sensitivity factor taking into account the vulnerability and importance of the main environmental resources in each subregion.

The overall Risk Profile for Australia is shown in Figure 4. This shows the geographical distribution of the Risk Index from all spills over 10 tonnes. Higher risk areas (where frequency, spill size and environmental sensitivity are all likely to be higher) are also shown (presented by the magenta areas), with progressively lower levels of risk being shown as indicated in the legend, down to the lowest category of risk (presented by the blue areas). It should be noted that the Risk Index represents the overall risk in any subregion, and variations of the risk level across a subregion are not shown.

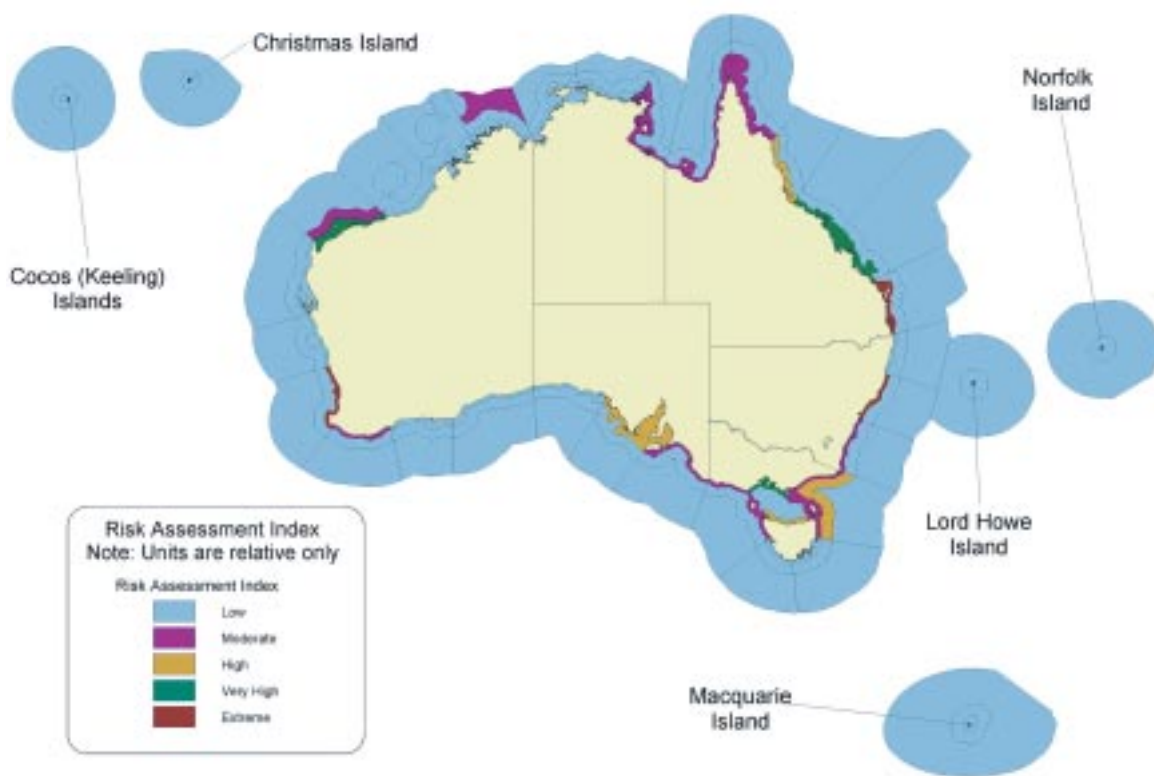


Figure 4
 Risk profile from all spills greater than 10 tonnes (all sources) (National Plan - DNV Risk Assessment 2000)

The Risk Profile indicates that there are some key areas of relatively higher risk from larger oil spills. These are most of the East Coast of Queensland, the Southwest and Northwest areas of Western Australia and the major port areas around Sydney and Melbourne.

2.8 Response planning

Under the IGA, State/NT Statutory Agencies, supported by Combat Agencies are primarily responsible for ensuring that contingency plans are developed at State/NT, regional and local levels, and that these plans complement those of adjacent areas. Statutory Agencies may be supported by State/NT Committees and will provide advice and support to Combat Agencies during pollution incidents.

The response to any pollution incident will be managed using the Oil Spill Response Incident Control System (OSRICS). OSRICS is based on an incident control system used in a wide range of emergency response activities to provide a standardised organisational structure that is flexible yet provides compatibility between agencies while ensuring accountability and standardised records. The system clearly defines roles and responsibilities and provides interoperability between agencies, States and Territories.

The principle marine pollution response structure and responsibilities that need to be addressed in the planning process include:

- The Statutory Agency, usually through a State Marine Pollution Committee (SMPC), shall provide management, operational, technical and environmental advice and support to the Combat Agency as required. This may include support for the management of the response.
- During major incidents, the overall response strategy shall be formulated by a nominated Marine Pollution Controller (MPC) and implemented by an Incident Controller (IC) and Section Officers forming the Incident Management Team (IMT). During lesser incidents, the IC shall be responsible for overall response strategy. The IC shall keep the Statutory Agency and/or SMPC informed of progress with the response.
- The Statutory Agency, the SMPC and AMSA, shall provide suitably experienced staff, to assist the MPC and IC to initiate and conduct response actions.
- Preparation and maintenance of State/NT contingency plans, that complement this plan are the responsibility of the relevant State/NT Statutory Agency.

2.9 Establishment of response organisations

Regional or local response organisations must be designed and established by the State/NT Statutory Agency. Where State/NT or local committees are established to support the Statutory Agency, it is recommended that the membership include senior representatives of the relevant company concerned. Committees should also be able to invite wider participation to ensure that all interests are represented and their resources and services are considered.

2.9.1 Response Organisation Structure

OSRICS lists four major functions under which it is possible to group the tasks that need to be undertaken during a marine pollution response - Planning, Operations, Logistics, and Finance and Administration. These form the main elements of the organisation structure under OSRICS and are designated as Sections in the structure. Responsibility for carrying out the tasks is delegated to a Section Officer who reports to the IC forming a Incident Management Team (IMT). Units staffed by people with appropriate skills and experience to deal with particular tasks may be created within the sections.

The number of staff required to fill positions in the OSRICS structure can be varied according to the size and complexity of the incident and the number of staff available. In a major incident, all positions may be filled but in a lesser incident one person may fill a number of positions. In a very small incident, it may only be necessary to appoint an IC who will be able to carry out all management functions. Figure 5 shows a typical OSRICS structure. A more detailed structure may be found in Appendix 4.

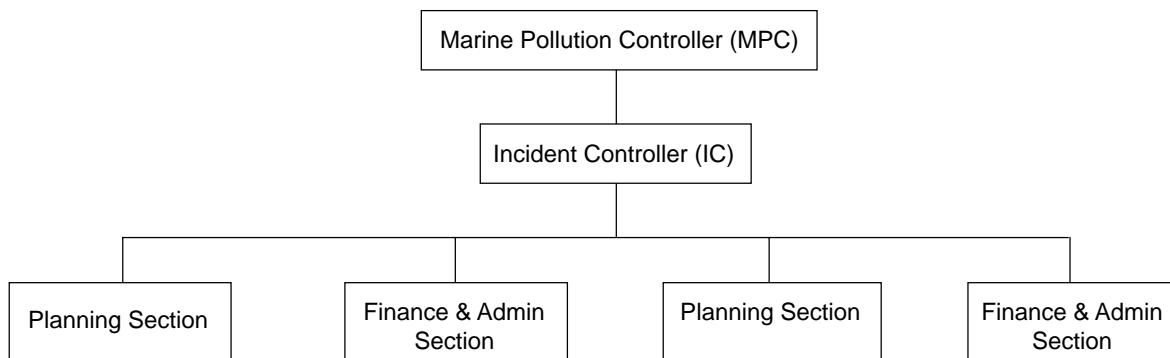


Figure 5 - Typical OSRICS Structure

Statutory Agencies should ensure that persons with appropriate experience and skills are identified so that they can be appointed to the following positions if a marine pollution incident occurs.

2.9.1.1 Marine Pollution Controller (MPC)

When a major incident occurs, the Statutory Agency shall nominate a senior management level Marine Pollution Controller (MPC) to take overall responsibility for managing the response. The MPC must be capable of ministerial as well as senior government, industry and media liaison.

2.9.1.2 Incident Controller (IC)

The Commonwealth and each State/NT Statutory Agency shall identify appropriate individuals to act as Incident Controller (IC) in accordance with relevant contingency plan requirements. During a major incident the IC is responsible to the MPC for the operational aspects of the response. During lesser incidents the IC shall have overall responsibility for managing the response.

The IC is responsible for the management and co-ordination of response operations at the scene of a pollution incident to achieve the most cost effective and least environmentally damaging resolution to the problem.

State/NT Statutory Agencies should ensure that the IC is assisted by a Response Team with appropriate planning, operational, scientific, chemical, environmental, logistical, administrative, financial and media liaison skills.

2.9.1.3 Planning Officer (PO)

The Commonwealth and each State/NT Statutory Agency shall identify appropriate individuals to act as Planning Officer (PO) in accordance with relevant contingency plan requirements.

The PO is responsible to the IC for the provision of scientific and environmental information, maintenance of incident information services, and the development of Strategic and Incident Action Plans.

The PO shall ensure the distribution of all information to the Incident Management Team and to all response personnel generally.

2.9.1.4 Operations Officer (OO)

The Commonwealth and each State/NT Statutory Agency shall identify appropriate individuals to act as Operations Officer (OO) in accordance with relevant contingency plan requirements.

The OO is responsible to the IC for all response operational activities. This includes ensuring that the requirements of Incident Action Plans are passed on to operational personnel in the field, and for ensuring that the plans are carried out effectively.

2.9.1.5 Logistics Officer (LO)

The Commonwealth and each State/NT Statutory Agency shall identify appropriate individuals to act as Logistics Officer (LO) in accordance with relevant contingency plan requirements.

In any response there is a vital need to ensure that response personnel are provided with adequate resources to enable an effective response to be mounted and that these personnel are provided with the essential amenities. The LO shall ensure that all resources are made available as required. This includes the procurement and provision of personnel, equipment and support services for operations in the field, and for the management of resource Staging Areas

2.9.1.6 Finance and Administration Officer (FAO)

The Commonwealth and each State/NT Statutory Agency shall identify appropriate individuals to act as Finance and Administration Officer (FAO) in accordance with relevant contingency plan requirements.

The FAO shall be responsible for all financial, legal, procurement, clerical, accounting and recording activities including the contracting of personnel, equipment and support resources. In addition, the FAO is responsible for the management of the Incident Control Centre (ICC).

2.9.1.7 Environmental and Scientific Co-ordinator (ESC)

The Environmental and Scientific Co-ordinator (ESC) shall be pre-appointed by the Commonwealth and the State/NT, either on a State/NT, regional or local area basis. During a spill response the ESC will normally form part of the Planning Section. In this role the Planning Section is to provide the IC with an up to date and balanced assessment of the likely environmental effects of an oil spill and advise on environmental priorities and preferred response options taking into account the significance, sensitivity and possible recovery of the resources likely to be affected. Under some State/NT arrangements the ESC may be an adviser directly to the MPC.

2.9.1.8 Media Liaison Officer (MLO)

An experienced and well informed Media Liaison Officer (MLO), appointed by the Combat Agency shall be provided for in the overall contingency plan. The MLO shall ensure adequate liaison between the IC's team and the media. All queries received from the media should be directed to this person.

Before releasing any information, the MLO's action should have the approval of either the MPC or IC, depending on the size of the spill incident.

2.10 Specialist advice and assistance

Specialist technical advice is available to response managers from a variety of sources. Advice can vary from the fate of oil, selection and deployment of pollution control equipment, dispersant use and the associated environmental effects of an oil spill. Specialist advice can also be provided in relation to the safety and stability of ships.

Some of the organisations that can provide a range of specialist environmental and operational technical advice in the event of an oil spill in the marine environment, include:

2.10.1 Australian Maritime Safety Authority (AMSA)

2.10.1.1 Environment Protection Group (EPG)

Environment Protection Group (EPG), AMSA, can provide advice relating to spill management, operational, logistic and technical issues, dispersant use and environmental effects. EPG can also provide outputs and advice on decision support tools outlined in section 4. All AMSA assistance will be co-ordinated through EPG.

2.10.1.2 Environment Protection Standards (EPS)

Environment Protection Standards (EPS), AMSA, can provide advice relating to intervention powers, legislation and environmental effects. EPS can also provide outputs and advice from decision support tools outlined in section 4.

2.10.1.3 Maritime Operations (MO)

Maritime Operations (MO), AMSA, can provide advice relating to ship safety, structural integrity and stability of marine casualties.

2.10.1.4 Australian Search & Rescue (AusSAR)

In addition to co-ordinating the rescue and saving of life, Australian Search and Rescue (AusSAR) can provide drift calculations and advice on offshore currents.

AusSAR has a range of communication facilities, that can be utilised during an incident, including Inmarsat satellite systems, enabling messages to be communicated directly to vessels.

2.10.2 Emergency Management Australia (EMA)

Emergency Management Australia (EMA) has agreed to assist in coordinating the movement of National Plan equipment. Where necessary EMA will facilitate access to Defence Force resources where commercial operators are unable to provide this service.

2.10.3 Environment Australia (EA)

Environment Australia (EA) (part of the Department of the Environment and Heritage) has Commonwealth responsibility for the management of Australian legislation and international conventions and treaties relating to biodiversity issues, habitat protection, endangered or protected species. This management responsibility includes both flora and fauna in the terrestrial and marine environments. In particular, information relating to the location(s), number, breeding patterns, feeding habits, migration pathways and the likely impact of pollution or habitat destruction on protected, migratory and endangered species.

EA Marine Coasts and Wetlands Section is able to advise on likely environmental impacts relating to the International Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter (London Dumping Convention) and other issues concerning marine oil spills and related environmental issues.

Parks Australia, a division of EA, manages national parks, nature reserves and marine parks in the external territories and in Australian waters outside the three-nm limit. Parks Australia can also provide a network of contacts in the States/NT wildlife and conservation authorities and community groups to assist the ESC or response organisations in wildlife issues.

2.10.4 Great Barrier Reef Marine Park Authority (GBRMPA)

Advice relating to the Great Barrier Reef World Heritage Area is available through the Great Barrier Reef Marine Park Authority (GBRMPA). Reference should be made to the marine pollution contingency plan for the Great Barrier Reef Marine Park (REEFPLAN).

2.10.5 Oil Industry

As outlined in part 2.6, the oil industry can provide equipment and personnel resources and advice on a range of issues, including oil characteristics and local industry resource availability.

2.10.6 State/NT & Local Authorities

State/NT and local authorities, such as Transport, and Conservation and Resource Management Departments, Environmental Protection Authorities, Emergency Services, Port/Harbour Authorities and local conservation groups are able to provide a wide range of site specific information and resources, either in relation to the environmental impacts, or response activities.

2.10.7 National Response Team

A National Response Team (NRT) comprising experienced personnel from operator to senior spill response manager level from Commonwealth/State/NT agencies, industry and other organisations has been developed.

The services of the NRT are obtained through EPG, AMSA, which has made arrangements with the respective government and industry agencies, for the release of designated personnel for oil spill response activities. These services are available when an oil spill incident exceeds the resource availability of the Combat Agency and State/NT concerned.

2.10.8 International Assistance

In the event of a major oil spill incident, it is likely that assistance may be sought from overseas in accordance with the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC 1990). Commonwealth Customs and Immigration

Departments will expedite the temporary import of equipment and experienced personnel should the need arise on a request from AMSA.

EPG, AMSA, in accordance with current Memoranda of Understandings and relevant International Conventions, assists neighbouring countries in relation to oil spill incidents in their waters, or obtains assistance when required from overseas in accordance with the OPRC Convention.

In the event that additional overseas resources are required to respond to an incident in Australia, then EPG in conjunction with AMOSC will arrange for assistance from the oil industry's Global Alliance providing services through:

- East Asia Response Limited (EARL) located in Singapore;
- Oil Spill Response Limited (OSRL) located in Southampton, UK.

2.11 Equipment availability

National Plan equipment is situated in strategic locations around Australia that reflect the likely risk of an oil spill in the marine environment. The majority of this equipment is located in the States/NT under the control of the State/NT Chair on long term loan through AMSA/State/NT equipment loan agreements outlined in the IGA (Appendix 1). These loan agreements include details of not only the equipment, but also storage and security arrangements and maintenance requirements.

The State/NT Chair may delegate the overall day to day maintenance and custodianship of National Plan equipment to the respective State/NT Authorities. However, as the signatory to the loan agreements the State/NT Chair maintains overall responsibility for equipment. Most of the National Plan equipment on long term loan to the State/NT is stored and maintained by local port authorities

Full details of National Plan, State/NT, AMOSC and other industry equipment, including custodians are contained in MOSES. Further information regarding MOSES is outlined in 4.4. An example of outputs from MOSES is also contained in Appendix 3.

National Plan ship-to-ship transfer equipment is located in Brisbane and Fremantle. This equipment is under the direction and control of EPG, AMSA. Release of this equipment shall be authorised by either the Manager, EPG, AMSA or the EPG Duty Officer.

All movements and use of AMSA owned National Plan resources shall be reported to the Manager, EPG, AMSA, within 24 hours to enable recording of information for management, cost recovery and stocktake/audit purposes and updating of MOSES, maintenance records and loan agreements. The term "Use of National Plan Equipment" shall be defined to include operational deployment and placement on stand-by.

When AMSA owned National Plan dispersant or sorbent stock is used during an incident, the Combat Agency shall furnish the Manager, EPG, AMSA, with a full report outlining the quantities used. State/NT custodians of AMSA owned National Plan sorbent material are responsible for the replacement of stock expended in response activities.

At the completion of an operation a representative of the IC shall advise the Manager, EPG, AMSA, of all usage of AMSA owned National Plan equipment, including details of any damage or discrepancies.

2.12 Financial arrangements

The IGA includes agreed funding arrangements (Paras 21-24) and the Administrative Arrangements under the IGA provide guidance on costs and expenses (Schedule 1, Paras 22-29). This includes details for reimbursement of expenses and the charging for use of National Plan equipment.

Statutory and Combat Agencies should note that detailed financial records, including all supporting information, are required where a claim is made in accordance with the IGA. This requirement is of particular importance when submitting claims to the Protection and Indemnity (P&I) insurers, as all claims will be assessed to ensure that the costs are reasonable, and that they can be supported by satisfactory documentation. Accordingly, agencies should have in place appropriate systems to ensure that these requirements are met and that these are adequately outlined in contingency plans.

2.13 Communications

In a pollution incident it is important that the IC has access to adequate communication facilities. In addition to the facilities available through AusSAR (section 2.10.1.4) it is envisaged that port Very High Frequency (VHF) radio facilities, National Plan communication systems, consisting of portable Satcom M, MiniSat, VHF marine band radios and repeater VHF aviation band radios and Ultra High Frequency (UHF) networks, and the AMOSC communications package would be available to co-ordinate a response. In a major incident it may be necessary to seek the assistance of emergency services radio networks and, if necessary, the Defence Forces. To obtain Defence assistance, a request should be made through EPG, AMSA, (section 4.5).

2.14 Wildlife response

When a marine oil pollution incident occurs it is inevitable that oiling of birds, marine mammals and other wildlife will eventuate.

The impact on wildlife will depend upon the type and quantity of oil, location of the spill, the environmental sensitivity and biodiversity of the area affected. Oiled wildlife attracts both significant community and media attention. The effectiveness of a spill response is sometimes measured on the success of its wildlife rescue and rehabilitation.

AMSA is developing National Oiled Wildlife Response guidelines, with the objective to provide guidelines for an immediate and effective protection, rescue, cleaning and rehabilitation of birds, marine mammals and other wildlife resources and their habitat that are harmed or potentially harmed by a marine oil spill. This is further supported by detailed State/NT internal arrangements.

Under most State/NT internal agreements, arrangements and State legislation, National parks and Wildlife Services, Natural Resource and Conservation agencies, or environment protection authorities have responsibility for wildlife protection and response to wildlife impacts such as oil spills. These arrangements vary from state to state and should be detailed within a State/NT or regional oiled wildlife plan.

2.15 Safe havens

Australia is better placed than many maritime nations in that passing traffic not calling at Australian ports is minimal, and States/NT have sufficient jurisdiction over waters and areas of the coast to enable the selection of safe havens.

It is rarely possible to deal satisfactorily and expeditiously with a casualty in open sea conditions and the longer a damaged ship is forced to remain at the mercy of the open sea, the higher the risk of its condition deteriorating and thereby becoming a greater pollution hazard.

Some States/NT have adopted specific policies on safe havens, and these should be followed as appropriate. Regardless of whether safe havens are pre-designated or not, the following criteria are basic for the selection of safe havens:

- adequate depth of water;
- good holding ground;
- shelter from effect of prevailing wind/swell;
- relatively unobstructed approach from seaward;
- environmental classification of adjacent coastline and fisheries activity;
- access to land/air transport; and
- access to loading/unloading facilities for emergency equipment.

It should be noted that the 1989 Salvage Convention places an obligation on Australian response authorities to take account of the need for co-operation between various parties concerned in a salvage operation, including public authorities, when considering admittance to ports of damaged vessels.

2.16 Training and exercises

The National Plan, incorporating AMSA, State/NT authorities and industry conduct regular training programs and exercises for personnel likely to be involved in a response to an oil spill in the marine environment. These training programs are designed to enable Australia to have sufficient numbers of trained personnel to mount a credible and effective response to an oil spill incident.

Training programs are conducted at three levels, which recognise the overall technical complexity of managing an oil spill response and that the associated knowledge required by personnel varies depending on their level of responsibilities.

The three levels of training conducted are:

Senior Management - Level 3

- the focus is on the requirements of senior government and industry management personnel, including Commonwealth, State/NT appointed Marine Pollution Controllers - responsible for high level decision making;

Middle Management - Level 2

- the focus is on the requirements of middle management personnel, including designated and potential Incident Controllers, their deputies and ESCs - responsible for the preparation of contingency and response plans and the management and conduct of effective oil spill response operations and associated logistic, administrative and financial tasks;

Operator - Level 1

- the focus is on the requirements of operational personnel, those undertaking on-site clean-up operations and operating spill response equipment.

Full details of the National Plan training program, including course content, are available from EPG, AMSA or <http://www.amsa.gov.au/me/natplan/Training.htm>

3 RESPONSE

3.1 Measures to be employed

In the event of an oil spill in the marine environment the following measures should be employed according to the circumstances of the spill and conditions prevailing. The importance of human health and safety in any response operation cannot be overstressed.

- If possible prevent, control or stop outflow of oil from the source.
- If coastal or marine resources are not threatened or likely to be threatened, monitor the movement and behaviour of the oil spill.
- If coastal and marine resources are threatened, activate response operations, to protect sensitive resources.
- If possible, contain the spread of oil.
- If, due to weather and sea conditions, response at sea is not feasible or protection of sensitive areas is not feasible, or these have already been affected, determine appropriate clean-up priorities and other response measures.

3.2 Overall protection priorities

Protection priorities to be employed during a response to an oil spill are, in order of descending priority:

- Human health and safety.
- Habitat and cultural resources.
- Rare and/or endangered flora and fauna.
- Commercial resources.
- Amenities.

However, in assessing protection priorities, it is necessary to maintain a balanced view of the potential success of particular response strategies. Strategies that may be unsuccessful in meeting a higher priority, could be highly successful in relation to a lower priority.

3.3 Incident reporting and activation

3.3.1 Initial Reports

Notification of a pollution incident will normally be made as a result of planned surveillance activities, through observations of Government agencies, by shipping and aircraft, by those responsible for the incident, or by the public. It is important that the information received be reported without delay to enable immediate and appropriate action to be taken. The response procedures which shall be followed are summarised in Figure 6.

The most efficient method of ensuring that reports are dealt with promptly is by reporting through AusSAR. AusSAR operates twenty-four (24) hours a day and is equipped with continuously monitored telephone, facsimile and telex lines.

The AusSAR contact details are outlined in Appendix 2.

3.3.2 Initial Action

The agency receiving the report of a pollution incident shall notify the relevant State/NT Statutory Agency as defined in the IGA. In circumstances where the notification was not received from AMSA, then this shall include advice to EPG, AMSA.

In the event that EPG, AMSA, is the first agency advised of a pollution incident, relevant State/NT Statutory Agency shall be notified.

The Statutory Agency shall promptly assess the information contained in any report and make the necessary decisions in relation to appropriate investigations and response actions, this will include jurisdiction and expected Statutory and Combat Agency responsibilities. The Statutory Agency shall advise the relevant Combat Agency of the need for a response. Following the report of an incident the Combat Agency shall issue a Pollution Report (POLREP) in accordance with section 3.3.4.

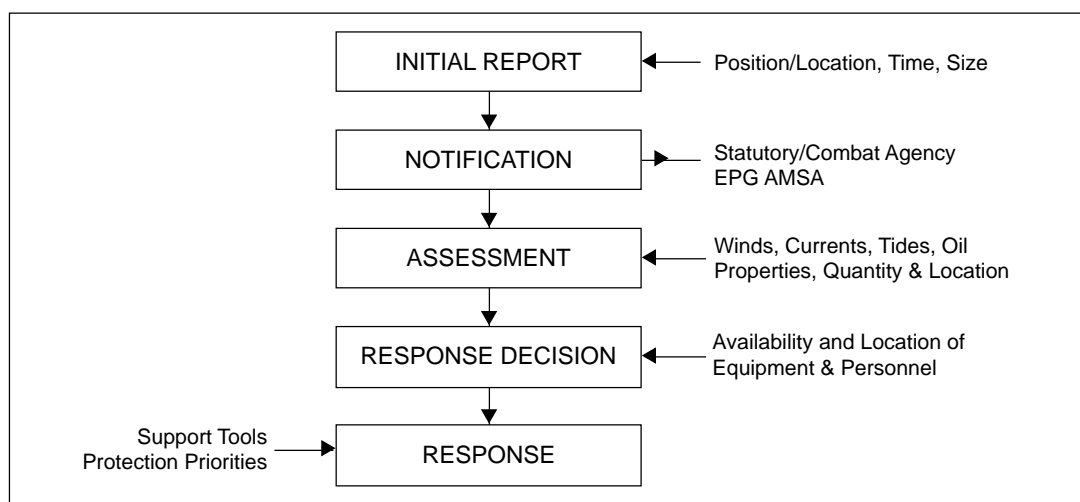


Figure 6 - Typical Response Procedure

3.3.3 Activation

When a report has been received by the Combat Agency, that agency should confirm the incident details. The proximity, and possible subsequent movement of an oil spill to sensitive areas will dictate the urgency of the method used to confirm the presence of the pollution.

On confirmation of the presence of oil or decision that response action is to be taken, the Combat Agency should mount a response operation in accordance with the appropriate contingency plan arrangements.

It should be noted that some States may have a requirement to formally activate a Plan. This should be done without delay to facilitate any subsequent cost recovery actions.

3.3.4 Pollution Report (POLREP)

After initial verbal advice has been provided to the Statutory Agency, the Combat Agency should issue a POLREP to relevant agencies. This would best be directed to AusSAR who would disseminate to relevant agencies based on the incident type and location. A generic POLREP form is shown in Appendix 5 (i) which can be used by agencies.

It should also be noted that the requirement for ships Masters to report discharges from their vessels is established by the MARPOL 73/78 Convention. For reference, a copy of the details that ships Masters should report is also listed at Appendix 5 (ii) (Harmful Substances Report).

3.3.5 Situation Report (SITREP)

During a marine pollution incident (or potential incident), it is essential that all relevant authorities be kept advised of any significant developments.

The IC will be responsible for ensuring that periodic Situation Reports (SITREPs) are despatched to those concerned. SITREPs should contain as much information as possible.

During an incident which involves the risk of marine pollution the Combat Agency shall be responsible for initiating SITREPs to relevant agencies, including AMSA. Concerning AMSA, these SITREPs should be directed to AusSAR who would disseminate to EPG. A suggested format, including required content, for reporting this information is outlined in Appendix 6.

3.4 Incident control

Operational control of a pollution incident is the responsibility of the Combat Agency representative nominated as IC, supported by an IMT that performs the tasks of the Planning, Operations, Logistics and Finance and Administration Sections required by OSRICS.

The IC shall establish an ICC at a location, in close proximity to the incident, affording resources and facilities for the sustained management of the incident. This shall include access to communication facilities, suitable road access and other resources required for the response.

3.5 Response plans

3.5.1 Strategic Plans

In a major incident it is important that a Strategic Plan is drawn up which clearly details the aims and objectives of the overall response. In some cases it may be necessary for strategic plans to be developed to cover a number of aspects of the incident. Strategic plans address the broader issues of the response, not short-term operational activities.

3.5.2 Incident Action Plans

Short-term operational objectives and activities are the subject of an Incident Action Plan (IAP). The IAP will provide details of the operational activities and objectives to be achieved over a short-term, specified period: initially this may be for the subsequent few hours only, but once the operation is underway it is likely to address the activities required over each of the following twenty-four hours or longer.

The IAP provides clear aims and objectives for the response.

3.6 Response options

A number of options exist for the treatment of oil which has been released into the marine environment. All may be effective to a degree according to the conditions prevailing and the sensitivity of the environment under threat. These include:

- surveillance;
- control and recovery;
- application of dispersant;
- in-situ burning;
- shoreline clean-up; and
- bioremediation.

3.7 Occupational Health and Safety

Response managers should be aware that at all times human life, health and safety is paramount. The degree of risk associated with clean up operations will depend on:

- (i) type of oil spilled;
- (ii) size of the spill;
- (iii) location of the spill;
- (iv) circumstances of the spill; and
- (v) weather conditions.

Fresh crude oil and refined petroleum products are capable of giving off inflammable gases. Fire and explosion therefore remains a real danger to personnel and equipment, particularly when fresh crude oil and certain refined products are situated in confined locations.

At all times response managers should be aware of the limitations and safe operating procedures for all equipment used throughout all phases of the clean up operation. This should, where necessary, include a risk assessment and development of a formal site-specific management plan, including details for induction and briefing procedures.

3.8 Environment Protection and Biodiversity Conservation Act (EPBC Act 1999)

The Minister for the Environment has issued a Notice of Exemption for the National Plan under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The effect of this notice is that response actions taken in accordance with the National Plan are exempt from the EPBC Act. In this context, the National Plan includes separate contingency plans for oil and chemicals, supported by State/NT contingency plans, regional contingency plans, contingency plans for ports, terminals and platforms, and vessel response plans.

It is important to note, however, that any response action contrary to one of these contingency plans would be subject to the EPBC Act.

3.9 Cultural and heritage issues

Important indigenous and non-indigenous culturally and historically significant sites and values exist in many parts of Australia's coastal areas. Therefore, when planning response operations there needs to be an awareness of these issues.

Issues that should be addressed include access to and general disturbance of areas. This includes recognition of cultural heritage values, semi-subsistence resource use and general protocols.

Typically there are limited accessible written records of significant sites or values. As such appropriate Commonwealth, State/NT and local government agencies should be consulted to facilitate contact with indigenous communities and obtain necessary information required by the IMT and response personnel.

3.10 Obtaining samples for evidence and analysis

In the aftermath of a pollution incident identification of the source of contamination is a vital component in identifying the polluter and for the subsequent allocation or recovery of costs. In the majority of cases of spills from known sources, there is unlikely to be any dispute about the accuracy of an analysis. In the case of a spill from an unknown source, where there will be a number of samples from different vessels to compare with a spill sample, multiple analysis methods of identifying the source may be required.

To ensure that a positive analysis result may be achieved correct sampling, storage, handling, preparation of the samples from potential sources is essential.

Further details concerning sample collection, storage and handling are outlined in Appendix 7.

3.11 Disposal of oil and oily debris

Clean-up operations can generate substantial quantities of oily debris. Temporary storage, transportation and final disposal methods shall be arranged to comply with Government disposal approvals. This will usually be facilitated by the responsible State/NT environment protection agency.

State/NT, regional and local contingency plans should contain information on the disposal of oily waste. This should include any pre-designated arrangements for disposal sites and approved contractors.

Ideally disposal sites should be identified as close as practical to those areas where oil pollution could most likely occur.

3.12 Equipment

On completion of an oil pollution response operation, the IC shall arrange recovery of all equipment, and unused materials and arrange their prompt return to the resource centre from which they came. In the event of a major incident, a NRT member will be available to assist in the co-ordination of equipment transfers, including returning equipment to its point of origin.

The IC, or delegate, will ensure that all equipment is cleaned after use to the extent available facilities allow and is returned to the ownership authority by the quickest possible means, having regard to freight costs.

On its return to the resource centre the equipment shall be thoroughly serviced in accordance with equipment maintenance schedules prior to being stored.

The Combat Agency shall ensure that all costs incurred in returning equipment to the resource centre, including cleaning and servicing is included in the overall schedule list of costs submitted for reimbursement by the polluter.

Details, including contacts for National Plan, State/NT, AMOSC and other industry resources held in each State/NT are given in MOSES; an example of MOSES output is included in Appendix 3. A copy of MOSES should be included in the appropriate State/NT Contingency Plan. Procedures to gain access to equipment are outlined in part 2.11 of this plan.

Requests for equipment from other States/NT should be made by the IC, directly to the State/NT Committee, which will, in turn, request the equipment through EPG, AMSA. See Appendix 2 for contact information.

3.13 Termination of a response

An incident response will be terminated when the Statutory Agency considers that the effective completion of the response is achieved based on expert Combat Agency advice.

The Statutory Agency will be responsible for announcing the termination of a response, after consultation with the Combat Agency. This should include issuing a final SITREP.

Termination arrangements should be outlined in State/NT, regional and local contingency plans.

4 RESPONSE SUPPORT

4.1 Oil Spill Response Atlas (OSRA)

4.1.1 About OSRA

Oil Spill Response Atlases (OSRAs) identify marine and foreshore ecosystems and biological resources for the determination of protection priorities and provide information to authorities on response options for example for boom deployment, chemical dispersant use, foreshore clean-up techniques to be employed and disposal sites for wastes generated.

4.1.2 Available Information

OSRA datasets include but are not restricted to: habitats both coastal and near shore marine; high definition coastlines; bathymetry contours for selected depths; nautical charts in scanned georeferenced format; scanned topographical charts for all of Australia (100K); marine parks, reserves and national parks; biological resources and conservation status; fisheries and aquaculture; coastal and marine wildlife resources; recreational resources; locations of National Plan equipment stockpiles; aerial photography for selected regions; National LandSat remote sensing (colour 50m); oblique photography linked geographically for selected regions; high resolution SPOT imagery for all harbours, ports and marine parks; landmarks and features; shoreline access and roads; airports, marinas and boat ramps; logistic and other infrastructure information.

4.1.3 Access to OSRA

Access to the OSRA and tools is via the State/NT ESC or State/NT Chairs. AMSA has holdings of such data for emergency purposes.

4.2 Oil Spill Trajectory Modelling (Ostm)

4.2.1 About OSTM

AMSA is custodian of the interactive Oil Spill Trajectory Modelling (OSTM) system, which is designed to predict the movement of oil. This system provides modelling of water movement in the coastal continental shelf region of Australian identifying speed of movement, weathering and spreading characteristics of the oil under the influence of prevailing currents and weather conditions. On scene visual observations obtained from aircraft overflights should be used to confirm the accuracy of OSTM predictions. This information should then be entered in the model to update predictions.

4.2.2 Activation of OSTM

Activation of OSTM is through the EPG Duty Officer, who can be contacted via AusSAR. Requests for activation of OSTM should be accompanied by a completed OSTM Proforma (Appendix 8) which can be sent by facsimile or e-mail (OSTM@amsa.gov.au) to AMSA. Predictions can be sent by facsimile or supplied in the form of a .dbf file for incorporation into the OSRA or other GIS applications. Copies of the OSTM Proforma are also available from AMSA's web site at <ftp://www.amsa.gov.au/download/docs/eps/ostm/ostm.doc>

4.2.3 Weather Updates

During the response, periodic updates of the prevailing winds and confirmed observations of the movement of the spill should be reported preferably by facsimile to AMSA, for inclusion as necessary in the continuing OSTM predictions. Additionally AMSA obtains Bureau of Meteorology forecast for comparative purposes.

4.3 Automated Data Inquiry For Oil Spills (ADIOS)

The Automated Data Inquiry for Oil Spills (ADIOS) is a computer based oil spill response tool, which was developed by the US National Oceanic and Atmospheric Administration for emergency spill responders and contingency planners.

ADIOS integrates a library of approximately one thousand oils with a short-term oil fate and cleanup model, which is designed to estimate the time that spilled oil will remain in the marine environment.

ADIOS calculations combine real-time environmental data based on user inputs, such as wind speed and water temperature, combined with carefully researched chemical and physical property information in its oil library. The program provides a best-guess answer of possible ranges in the values of estimated spill properties and oil fate. ADIOS can be accessed through the EPG Duty Officer, who can be contacted via AusSAR.

4.4 Marine Oil Spill Equipment System (MOSES)

The Marine Oil Spill Equipment System (MOSES) is a computer database, that lists the type, quantity, location, status and availability of pollution control equipment.

The database contains listings of National Plan, State/NT and industry equipment that is available for use in response to a marine oil spill. An example of outputs from MOSES is contained in Appendix 3. Copies of MOSES outputs are available in State/NT contingency plans or directly from EPG, AMSA.

4.5 Charter and hire arrangements

4.5.1 Charter of Vessels

During an incident there may be the requirement to charter local vessels to assist in response operations. A Vessel Charter Agreement used by AMSA shown in Appendix 9 provides an example of an agreement, which may be amended for use by other agencies. It is suggested that a formal agreement should be used whenever there is a need for agencies to charter a fishing vessel, or other craft, for use at oil pollution incidents and where the owner agrees to its use for such charter.

Whilst the IC may need to control the operation of a vessel to suit prevailing conditions and the particular circumstances of the incident, it shall be made clear that *THE NAVIGATION AND SAFETY OF THE VESSEL WILL REMAIN THE RESPONSIBILITY OF THE VESSEL'S MASTER AT ALL TIMES.*

When an owner is not prepared to accept the suggested agreement, but is prepared to make a vessel available, the charterer should ensure that:

- (a) the vessel complies with all safety and equipment requirements;
- (b) it is made clear by the charterer to the owner that the controls shall apply at all times.

All other aspects of the charter shall be the subject of local negotiation at the time of the incident.

Details of craft availability, including Port and State/NT Government craft, should be shown in appropriate regional and local contingency plans.

4.5.2 Hire of Spray Aircraft

AMSA in conjunction with the AIP through its oil spill centre - AMOSC - have put in place a Fixed Wing Aerial Dispersant Capability (FWADC) for the application of oil spill dispersants. This capability has been achieved by means of a contract with Australian Maritime Resources (AMR) based in Adelaide, SA.

Based on the concept of utilising large agricultural aircraft, the FWADC is designed to complement informal dispersant spraying arrangements using helicopters, which are confined to close inshore work. The aircraft have a dispersant capability of between 1890 - 3100 litres, depending on aircraft type and model.

AMR, as the contractor, is required to have available at least two aircraft on any one day. These aircraft are located at Tintinara (SA) or Adelaide (SA) and either Emerald (Qld) or St George (Qld). Additionally, aircraft will also be available for approximately 275 days per year each at Scone (NSW), Ballarat (Vic) and St George / Emerald. Aircraft activation is on a basis of a four hour response time, i.e. available to fly within four hours of being requested to respond to an incident.

Activation of the FWADC is through the EPG Duty Officer, who can be contacted via AusSAR. The AMSA EPG Duty Officer will make an assessment of the requirement and then contact AMR, who within 30 minutes will advise AMSA of the nominated aircraft and ETA.

As the FWADC Contract does not include a stand-by arrangement, it is important to note that a decision to activate the FWADC incurs a substantial daily charge. The daily charge is in addition to charges for actual flying time. Notwithstanding the absence of a stand-by arrangement, AMSA will advise AMR, for planning purposes (not an activation), of significant incidents where dispersant application may be considered as a major response option.

It should be noted that only National Plan approved dispersants are to be used in response to any incident involving dispersant use. Full details of approved dispersant can be obtained from EPG, AMSA or <http://www.amsa.gov.au/me/natplan/TOOLBOX/dispersa/apprvdisp.htm>.

Further details of the FWADC are available through EPG, AMSA.

4.5.3 Surveillance Aircraft

Where the source of an incident is not identified and thus recovery of costs unlikely, or where it is intended to claim reimbursement of costs from AMSA under the IGA arrangements, then the EPG Duty Officer or Manager, EPG, AMSA must approve the use of aircraft for surveillance or investigation.

Procedures for the identification and charter of appropriate aircraft should be shown in appropriate State/NT, regional and local contingency plans.

4.5.4 Hire of Other Equipment.

The hire of earthmoving, storage, transport or other equipment will be arranged by direction of the IC as required in a clean up operation.

4.6 Defence Force assistance

Requests for Defence Force assistance, including the use of military transport are to be directed to the EPG, AMSA.

After assessing and approving any requests, EPG will seek the assistance of the Defence Forces through EMA, Canberra. EMA will arrange for Defence Force assistance once all avenues of utilising commercial resources have been exhausted, or where time frames are such that it is impractical to use normal commercial resources.

Following approval by the Defence Department of a request, EPG will continue to liaise with EMA regarding transport details.

Costs associated with the engagement of Defence Force resources, will be charged against the incident and recovered from the polluter. These costs are determined by the Defence Forces, in accordance with Government cost recovery directions and, therefore, may exceed normal commercial rates.

4.7 Salvage arrangements

4.7.1 Salvage Involvement

In the event of an incident involving a damaged or disabled ship, it is paramount that salvage industry be involved in the response as soon as possible. Salvage activities may need to be arranged to take the vessel in tow, refloat a grounded vessel, or reduce or stop a discharge of oil to minimise environmental damage resulting from the casualty. It is essential that these operations be undertaken as soon as possible.

In accordance with the IGA, AMSA has responsibility for safety issues relating to vessels on interstate or foreign voyages and will be responsible for ship operational matters. These functions include alerting and liaising with salvors, taking measures to minimise oil out flow and other salvage activity.

A salvor will normally be appointed by the vessel's Master/Owner by signing a Lloyds Open Form Agreement. However, in cases where this does not occur, AMSA may use its powers under the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969, to either direct the Master/Owner to engage a salvor or alternatively contract a salvor to undertake necessary work, with costs recoverable from the owner.

4.7.2 Salvage Liaison

During an incident requiring the salvage of a vessel, consideration should be given to the appointment of an On Scene Casualty Co-ordinator (OSCC). The role of the OSCC is to enable continuing exchange of information regarding the salvage operation between the IC, the Salvage Master and Statutory/Combat Agencies. This will enable the Salvage Master to limit briefing to one person, whilst at the same time providing for continuity in information flow. An AMSA marine surveyor is available to act as the OSCC as required.

4.7.3 Independent Salvage Advice

In a major casualty the possibility may arise for the need to have access to independent salvage advice. AMSA has identified three suitable companies, which can provide independent advice on the salvage operation, including whether the proposed salvage operations are appropriate, independent of the salvor or the owner. In the event of requiring such advice, AMSA will make appropriate arrangements with one of the identified companies.

In incidents involving an intrastate vessel, the State/NT may wish to undertake the above salvage arrangements. AMSA will provide assistance where required.

4.8 Updating the Plan

Contingency Plans are evolving documents, and as such require regular updating. It is recommended that all Contingency Plans be reviewed annually to take into account policy changes and experience from incidents and exercises. Regular amendments should be made to reflect changes in contact, equipment and other details.

Minor amendments to this Plan will be issued by AMSA as they become necessary. AMSA will review the Plan annually and any major revisions presented to NPOG for endorsement.

Information for updating the Plan should be forwarded on a regular basis to:

Manager
Environment Protection Group
Maritime Operations
Australian Maritime Safety Authority
GPO Box 2181
CANBERRA CITY ACT 2601
or by Facsimile: (02) 6279 5076

APPENDIX 1

Inter Governmental Agreement & Administrative Arrangements

Inter-governmental Agreement on the National Plan To Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances

This AGREEMENT is made on the 25th day of May 2001.

BETWEEN

The Commonwealth of Australia

The State of New South Wales

The State of Victoria

The State of Queensland

The State of Western Australia

The State of South Australia

The State of Tasmania And

The Northern Territory

("The Parties")

Definitions

"Australian Maritime Group" means the group of representatives from the transport agencies of the Commonwealth, States and Northern Territory.

"Australian Transport Council" means the group of Commonwealth, State and Territory Ministers who have responsibility for transport matters from time to time.

"Combat Agency" means the agency having operational responsibility in accordance with the relevant contingency plan to take action to respond to an oil and/or chemical spill in the marine environment.

"Committee" means the National Plan Management Committee established in accordance with paragraph 3 of this Agreement.

"National Plan" means the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances.

"Review Report" means the report of the 1999/2000 Review of the National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances of 30 June 2000 endorsed by the Australian Transport Council on 25 May 2001.

"Standing Committee on Transport" means the heads of the transport agencies of the Commonwealth, States and Territories, or their representatives.

"Statutory Agency" means the State/NT or Commonwealth agency having statutory authority for marine pollution matters in their area of jurisdiction.

Principle

Since its establishment in 1973, the National Plan has been characterised by willing and effective cooperation between key players from both government and industry, and has provided both timely and effective response to actual pollution incidents.

Nothing in this agreement lessens the need to maintain this high level of cooperation between all stakeholders in order to provide timely and effective response to actual pollution incidents, including making available equipment and trained personnel as and when needed.

Recitals:

Whereas

- A. The Parties have agreed to the implementation of the Review Report recommendations concerning the administrative and funding arrangements under the National Plan for responding to oil and chemical pollution in the marine environment;
- B. The Parties agree that the implementation of the recommendations of the Review Report, and the administrative and funding arrangements set out in Schedules 1 and 2 to this Agreement require the establishment and implementation of a cooperative arrangement to ensure that:
 - (i) the national approach to preparedness and response to oil and chemical spills in the marine environment under the National Plan is continued and strengthened, consistent with the recommendations of the Review Report, with the active participation of industry groups wherever possible and with due regard to existing State/NT emergency management arrangements;
 - (ii) the division of responsibility between the Parties is clear in relation to maintaining the national preparedness and response capacity in accordance with the National Plan and to manage associated funding, equipment, and training programs to support National Plan activities;
 - (iii) mechanisms are established to ensure that decision making under the National Plan is cooperative and that the obligations of the Parties under the National Plan are met; and
 - (iv) principles are agreed under which the obligations of the Parties under the National Plan are to be funded.
- C. The Parties note that the Australian Maritime Safety Authority (AMSA), established under the *Australian Maritime Safety Authority Act 1990* as a Commonwealth Authority, is the national safety agency with a primary role in maritime safety, protection of the marine environment and aviation and marine search and rescue. AMSA is largely self-funded through levies on the commercial shipping industry. AMSA has statutory authority for marine pollution matters within the jurisdiction of the Commonwealth of Australia. One of AMSA's primary areas of responsibility is protection of the marine environment through management of the National Plan.
- D. The Parties are agreed that the elements of the cooperative arrangement are:
 - (i) the establishment of a National Plan Management Committee to be responsible for strategic management of the National Plan and to report to the Australian Transport Council through the Australian Maritime Group and the Standing Committee on Transport;
 - (ii) the establishment of a National Plan Operations Group to report to and support the National Plan Management Committee by considering the overall operational aspects of the National Plan;
 - (iii) that the Statutory Agency in each State/NT is to be responsible for the coordination of the local administration and operation of the National Plan;
 - (iv) continuation of AMSA as the managing agency of the National Plan;
 - (v) a Memorandum of Understanding between AMSA and the Australian Institute of Petroleum; and
 - (vi) the establishment of principles under which the obligations of the Parties under the National Plan are to be funded.

NOW IT IS AGREED BY ALL PARTIES AS FOLLOWS:

Operation of the Agreement

1. The Agreement will commence on the date it is signed by the Commonwealth, the States and the Northern Territory.
2. The Parties will take such action as is provided for by this Agreement and as is otherwise required to achieve the objectives set out above by initiating the administrative acts and procedures provided for by this Agreement, in accordance with the roles and responsibilities set out below.

Operation and functions of the Committees and Statutory Agencies

National Plan Management Committee

3. The Parties will establish a National Plan Management Committee to provide advice to the Australian Transport Council on the strategic, policymaking and funding direction for the National Plan. The functions of the National Plan Management Committee are to:
 - (i) provide strategic oversight and direction for the effectiveness and efficiency of the National Plan, including preparedness and response standards;
 - (ii) oversee the ongoing effectiveness of the formal arrangements between key stakeholders and AMSA as National Plan manager;
 - (iii) provide advice to the Australian Transport Council on the collection and distribution of funds for the National Plan, including contributions from the Commonwealth, the States/NT, and shipping industry;
 - (iv) develop and maintain a four-year rolling budget for AMSA's National Plan activities to be submitted for advice each year to the Australian Transport Council;
 - (v) develop, implement and monitor mechanisms to ensure the roles and responsibilities of the stakeholders are clearly understood by all stakeholders in the National Plan;
 - (vi) prepare an annual report to be distributed to all stakeholders on achievement of the National Plan objectives, activities and operations including financial management;
 - (vii) provide advice to AMSA in developing and maintaining international and regional cooperative arrangements for marine pollution response and preparedness; and
 - (viii) perform such other functions as the Australian Transport Council may confer on it from time to time.
4. Membership of the Committee will comprise a senior executive representative (or alternate with equivalent authority) from each of the Parties, AMSA (as National Plan manager) and a representative of each of the following stakeholders to the National Plan:
 - (i) Association of Australian Ports and Marine Authorities;
 - (ii) Great Barrier Reef Marine Park Authority;
 - (iii) Australian Institute of Petroleum;
 - (iv) Australian Shipping Federation; and
 - (v) Plastics and Chemicals Industries Association.

5. The Committee will have an independent chair who is not a representative of the Parties or the stakeholders.
6. Each member will bear the costs and expenses incurred in the course of Committee business.
7. The Committee will hold such meetings at least annually, and will hold additional meetings as necessary for the efficient performance of its functions. Meetings may be held by teleconference or videoconference. Notice of meetings and agendas will be given at least one month in advance, unless otherwise agreed by the members. Meetings will not be held unless a majority of State/NT members are able to attend.
8. The Parties will encourage their representatives to provide a whole-of-government perspective, and not just the views of their respective agencies.
9. The Committee will make its reports and recommendations to the Australian Transport Council through the Australian Maritime Group and the Standing Committee on Transport.
10. The Australian Transport Council will be entitled to be notified of and to be given information concerning any matter being dealt with by the Committee. The Australian Transport Council will have the right to refer any matter arising out of or in connection with their marine pollution prevention responsibilities directly to the Committee for consideration.
11. The secretariat for the Committee will be provided by AMSA.

National Plan Operations Group

12. The Parties will establish a National Plan Operations Group to support the National Plan Management Committee by considering the overall operational aspects of the National Plan. The functions of the National Plan Operations Group are to:
 - (i) develop and implement programs to:
 - (a) provide training under the National Plan;
 - (b) coordinate the National Response Team¹ to assist in a response under the National Plan to an oil or chemical spill in the marine environment;
 - (c) monitor National Plan equipment, identify acquisitions to be made by AMSA of National Plan equipment and maintenance of AMSA-owned National Plan equipment;
 - (d) ensure equipment allocation, compatibility and preparedness to enable a consistent approach to be taken by each Party for the purposes of paragraph 20 of this agreement;
 - (e) test the effectiveness of contingency plans through conducting incident response exercises;
 - (f) maintain support systems under the National Plan, including fixed wing aerial dispersant spraying, risk assessment, the Oil Spill Response Atlas, and the Oil Spill Trajectory Model;

¹ The National Response Team is a group of trained and experienced personnel from various National Plan stakeholder agencies that is available to provide support across all response disciplines to any National Plan Combat Agency in the event of a major oil pollution incident.

- (g) support the adoption of new technology and evaluate research and development projects for National Plan funding;
 - (h) address marine environmental issues such as guidelines to determine extent, and restoration of, damage caused by marine pollution incidents;
 - (i) raise community awareness about protection of the marine environment from oil and chemical pollution; and
 - (j) support and give guidance to the implementation of the Oil Spill Response Incident Control System.
- (ii) establish and oversight working groups that are necessary for the National Plan Operations Group to carry out its functions;
 - (iii) assist States/NT to establish and maintain effective communication channels with all relevant stakeholders; and
 - (iv) perform such other functions as the National Plan Management Committee may confer on it from time to time.
13. Members of the National Plan Operations Group will have senior operations management responsibilities within their respective agencies or organisations. Parties to this agreement and the following stakeholders in the National Plan will be represented:
- (i) Australian Marine Oil Spill Centre;
 - (ii) Environment and Scientific Coordinators Network;
 - (iii) Australasian Fire Authorities' Council; and
 - (iv) Association of Australian Ports and Marine Authorities.
14. The National Plan Operations Group will be chaired by AMSA (as National Plan manager).
15. Each member will bear the costs and expenses incurred in the course of National Plan Operations Group business.
16. The National Plan Operations Group will hold such meetings as are necessary for the efficient performance of its functions. Meetings will be held twice yearly or more often as the Operations Group decides is appropriate and where possible will be held before meetings of the National Plan Management Committee. Meetings may be held by teleconference or videoconference. Notice of meetings and agendas will be given at least one month in advance, unless otherwise agreed by the members. Meetings will not be held unless a majority of State/NT members are able to attend.
17. The National Plan Operations Group will make its reports and recommendations to the National Plan Management Committee.
18. The secretariat for the National Plan Operations Group will be provided by AMSA.

State/NT Responsibilities

19. A Statutory Agency in each State and the Northern Territory will be responsible for coordinating the local administration and operation of the National Plan, in accordance with the National Plan Administrative Arrangements, appearing in Schedule 1 to this Agreement. This may be done in consultation with a State/NT Committee and with due consideration to the relevant State/NT emergency management arrangements.

20. The responsibilities of the National Plan State/NT Statutory Agencies will be:
- (i) administration and operation of the National Plan in the State/NT, including provision of support to the National Plan Management Committee and National Plan Operations Group;
 - (ii) developing and implementing contingency plans for combating marine pollution under the National Plan;
 - (iii) advising and supporting the Combat Agency during the response to a marine oil or chemical pollution incident;
 - (iv) advising AMSA in relation to capital equipment, maintenance and training requirements for that State/NT on an annual basis; and
 - (v) ensuring all oil and chemical pollution incidents and reports of oil spill sightings whether confirmed or unconfirmed are reported to AMSA.

Funding

21. The Parties agree that the following principles should form the basis under which obligations are funded under the National Plan:
- (i) Preparedness for marine pollution incidents should be funded on the basis of the principle that the potential polluter pays;
 - (ii) Response to marine pollution incidents should be funded on the basis of the principle that the polluter pays; and
 - (iii) Agencies responding to and incurring costs in relation to pollution incidents where the polluter is not identified, or costs are not recoverable, will be reimbursed by AMSA on the basis of the potential polluter pays, as set out in paragraphs 22 to 29 of Schedule 1 to this Agreement.
22. Each State/NT agrees that, following consultation with the National Plan Operations Group and relevant stakeholders, they will ensure that:
- (i) each oil/chemical terminal and offshore drilling rig/platform within their jurisdiction maintains, either directly or indirectly, an appropriate preparedness and response capacity consistent with the level of risk posed by the terminal, offshore drilling rig or offshore platform;
 - (ii) each port within their jurisdiction, including private ports and private terminals within ports, maintains, either directly or indirectly, an appropriate preparedness and response capacity consistent with the level of risk within the port;
23. The Parties agree that any arrangements put in place to provide participation by ports in National Plan activities outside port limits are undertaken on a commercial basis, where such participation is not separately mandated by State/NT legislation.
24. The Parties agree to the specific funding obligations appearing in Schedule 2 to this Agreement.

Review

25. The National Plan Management Committee will report to the Australian Transport Council on an evaluation of the cooperative arrangements contained within this Agreement within 12 months of its commencement and at regular intervals thereafter as determined by the Australian Transport Council.
26. The Australian Transport Council will decide as soon as practicable after receipt of the report whether this Agreement should continue, be modified or terminated. The Council will make their decision by consensus and, if the decision is to extend, modify or terminate this Agreement, take all necessary steps to give effect to their decision.
27. The Australian Transport Council may at any time review or modify this Agreement and, if they decide by consensus to terminate it, do all that is necessary to terminate it.
28. The National Plan Management Committee may at any time review or modify the Schedules to this Agreement.

SIGNED by *(the Commonwealth of Australia)*

Date:

SIGNED by *(the State of New South Wales)*

Date:

SIGNED by *(the State of Victoria)*

Date:

SIGNED by *(the State of Queensland)*

Date:

SIGNED by *(the State of Western Australia)*

Date:

SIGNED by *(the State of South Australia)*

Date:

SIGNED by *(the State of Tasmania)*

Date:

SIGNED by *(the Northern Territory)*

Date:

SCHEDULE 1

Administrative Arrangements

Application

1. These arrangements will apply to action taken when responding to marine oil and chemical pollution in Australian waters.
2. Arrangements between the Commonwealth and/or State/NT authorities and the Australian Institute of Petroleum with respect to the role of the oil industry and for the mutual use of equipment and expertise are set out in separate agreements.

Division of Responsibility

3. In some cases the Statutory and Combat Agencies will be the same agency.
4. In accordance with the Offshore Constitutional Settlement jurisdictional arrangements, the Statutory Agency responsible for overseeing response action for oil and/or chemical spills other than those from offshore petroleum operations is as follows:
 - (i) within the three nautical mile coastal waters and foreshore areas - the State/NT government's designated Statutory Agency;²
 - (ii) outside the three nautical mile coastal waters and in coastal waters and foreshore areas not within State/NT jurisdiction - the Australian Maritime Safety Authority (AMSA), as the Commonwealth Statutory Agency.
5. In accordance with the Petroleum (Submerged Lands) Act 1967 and relevant State/NT offshore petroleum legislation, Statutory Agency responsibility for overseeing response actions to pollution events from offshore petroleum operations lies with the relevant State/NT Statutory Agency, or the agent for the Commonwealth in areas of Commonwealth jurisdiction.
6. Combat Agency responsibility for responding to oil and/or chemical spills in various jurisdictions can vary between the States/NT. Generally, the following applies:

For State/NT waters:³

- (i) at oil terminals - the relevant oil company or terminal operator using industry arrangements as required such as the AMOSPlan mutual aid arrangements through the Australian Marine Oil Spill Centre (AMOSC). Should a situation develop where the necessary response is beyond oil company or terminal resources, responsibility for control will transfer to the Statutory Agency, with response assistance from other National Plan stakeholders as required. Statutory Agencies should enter into pre-designated response arrangements with oil terminal operators which clearly specify the agreed division of responsibilities and terms and conditions for transferring control;

² In Queensland, it is recognised that offshore jurisdiction between the Commonwealth and the State is particularly complex as a consequence of the many islands and cays within the Great Barrier Reef and Torres Strait. Jurisdiction in these areas is set out in maps that have been prepared for the purposes of this agreement. These maps are held by the Queensland and Commonwealth Statutory Agencies and should be referred to when determining jurisdiction for incidents in these areas.

³ In NSW, the Combat Agency for all oil and chemical spills in State waters is the designated Statutory Agency.

- (ii) at chemical terminals - the relevant chemical company or terminal operator under industry arrangements as required such as the Chemsafe Emergency Management Program arrangements under the Plastics and Chemicals Industries Association. Should a situation develop where the necessary response is beyond chemical company or terminal resources, responsibility for control will transfer to the Statutory Agency, with response assistance from other National Plan stakeholders as required. Statutory Agencies should enter into predesignated response arrangements with the relevant Chemical Terminal operators which clearly specify the agreed division of responsibilities and terms and conditions for transferring control;
- (iii) in ports (other than at oil and chemical terminals within a port), the port operator or responsible State/NT authority, as specified in the relevant contingency plan, with assistance from other National Plan stakeholders as required; and
- (iv) within the three mile coastal waters - the responsible State/NT Statutory Agency with assistance from other National Plan stakeholders as required.

For Commonwealth waters:

- (v) beyond the three mile coastal waters - the Commonwealth via AMSA except in those incidents close to shore when oil or chemicals are likely to impact the shoreline. In these circumstances, the State/NT via the Statutory Agency will be the Combat Agency for protecting the coastline while AMSA assumes responsibility for ship operational matters, eg containing the spill within the ship, organising salvage, etc.

For the Great Barrier Reef:

- (vi) in the REEFPLAN area of the Great Barrier Reef - Queensland Government via the Queensland National Plan State Committee, with assistance from other National Plan stakeholders as required.

For offshore petroleum operations:

- (vii) for spills emanating from offshore petroleum operations - the relevant oil company with assistance, as required, from the Statutory Agency;
7. In those incidents close to State/NT borders it is essential for high-level consultation and cooperation between the two Statutory Agencies to ensure a clear delineation of responsibility for the response.
 8. The Combat Agency will as soon as possible undertake preventive and clean up action or may request another agency to act on its behalf.
 9. In circumstances where the incident has exceeded or is likely to exceed the capacity of the Combat Agency to respond effectively or the response is not being conducted effectively, the Statutory Agency may assume control of the response.
 10. The Statutory Agency is responsible for the institution of legal proceedings and the recovery of clean up costs on behalf of all participating agencies.
 11. An oil/chemical spill response will be terminated when the Statutory Agency considers that the effective completion of the response is achieved based on expert Combat Agency advice. The Statutory Agency will be responsible for announcing the termination of a response, after consultation with the Combat Agency. These arrangements are to be specified in all contingency plans.

Australian Maritime Safety Authority

12. AMSA's role as managing agency of the National Plan includes:

- (i) maintaining the National Maritime Oil Spill Contingency Plan and the National Maritime Chemical Spill Contingency Plan;
- (ii) providing on-site oil and/or chemical spill operational, technical, environmental and administrative advice and assistance to Statutory and Combat agencies;
- (iii) maintaining a listing of National Response Team members to assist Statutory and Combat Agencies to respond to oil spills in the marine environment;
- (iv) maintaining a national database of trained oil and/or chemical spill response personnel;
- (v) maintaining a national inventory of marine oil and chemical spill response equipment;
- (vi) maintaining uniform standards and testing protocols for oil spill dispersants and other chemical response agents;
- (vii) maintaining a national database of marine oil and chemical spill incidents, collating data provided by State/NT agencies;
- (viii) providing advice regarding setting of standards for equipment, training and implementation of oil and chemical spill responses;
- (ix) providing advice and guidelines for contingency planning and audit of response plans;
- (x) managing the development and delivery of annual and longer term equipment acquisition programs for AMSA-owned equipment;
- (xi) auditing and inspecting response equipment stockpiles and maintenance programs;
- (xii) coordinating and auditing the National Plan training program endorsed by the National Plan Operations Group and delivery of AMSA courses;
- (xiii) reviewing and reporting to National Plan stakeholders on State/NT or industry spill responses and exercises;
- (xiv) managing research and development projects endorsed by the National Plan Operations Group and the dissemination of information on pollution prevention, improved spill response and planning techniques;
- (xv) being accountable for the Commonwealth's responsibilities as outlined in these Arrangements;
- (xvi) managing revenue collected by AMSA for the purposes of the National Plan and expenditure against a four-year rolling budget developed by the National Plan Management Committee, and provision of financial statements to the National Plan Management Committee;
- (xvii) managing the Oil Spill Response Atlas and Oil Spill Trajectory Modelling programs;
- (xviii) providing the Chair to the National Plan Operations Group;
- (xix) represent the interests of National Plan stakeholders in international fora;
- (xx) providing secretariat services to the National Plan Management Committee and the National Plan Operations Group; and
- (xxi) administering and enforcing Commonwealth legislation.

Responsibility for overall coordination of a major spill

13. Statutory Agencies will each nominate one or more senior persons authorised to act as Marine Pollution Controller with overall responsibility for ensuring that a response to a major incident within their relevant jurisdiction, as defined in paragraphs 4, 5 and 6 of this Schedule, is managed and coordinated appropriately. This includes coordinating the delivery of all available combat resources both in Australia and, where necessary, from overseas.
14. The nominated persons (Marine Pollution Controller) will have authority to direct response and clean up arrangements at a high management level and will be responsible for high level liaison with Ministers as well as senior government and industry representatives.

Equipment

Ports, terminals, rigs and platforms

15. Consistent with the funding principles set out in this Agreement, States/NT and the Commonwealth will each ensure that ports, terminals, rigs and platforms will ensure a first-strike capacity is provided to respond to oil spills within their declared areas of operation. This capacity may be provided directly by the operator, or as a service to the operator by a separate organisation. This first strike capacity will generally involve the provision of Tier 1 (up to 10 tonnes) type spill equipment and capacity for its effective operation, although there may also be circumstances where a greater or lesser capacity would be appropriate.⁴
16. State/NT Statutory Agencies, in consultation with the relevant terminal, port, rig or platform operator, will determine the required first strike capacity for these operations, having regard to the individual circumstances. The National Plan Operations Group is to be consulted when determining appropriate capacity.
17. The equipment employed will be compatible with national standards and/or criteria established for National Plan equipment by the National Plan Operations Group. AMSA is available to assist stakeholders in determining equipment compatibility.

Transitional Arrangements

18. For the purposes of paragraph 15 of this Schedule, AMSA will transfer ownership of first strike equipment to the States/NT or their nominees at no cost. The National Plan Operations Group will determine the distribution of this first strike equipment, considering equitable arrangements, gaps arising from risk analysis, and age and condition of equipment. The cost for any identified shortfall in equipment or equipment repair will be met from the National Plan.

Australian Maritime Safety Authority

19. Regional resource centres of equipment and material for use in the response, containment, monitoring and clean up of marine pollution will be maintained by AMSA in accordance with this agreement.

⁴ Some States/NT have legislation requiring ports to respond to oil spills in coastal waters adjoining the State, for which ports receive appropriate regulatory fees.

20. The contents of the resource centres will be determined by the National Plan Operations Group based on recommendations from Statutory Agencies and taking into consideration national priorities and equipment held by ports, terminals, rigs and platforms, and the Australian Marine Oil Spill Centre. All stakeholders will be kept informed of any significant changes to the contents of the resource centres.
21. AMSA will maintain a database of all National Plan equipment. This database will be available for use by all National Plan stakeholders. States/NT and industry will keep AMSA informed of detailed holdings/movements in order that national pollution equipment database records can be maintained accurately.

Costs and Expenses

22. Where a marine oil and/or chemical pollution incident occurs detailed records will be kept of all operations (use of personnel, equipment, etc). When relevant, the Protection and Indemnity Club representative is to be notified as soon as possible and kept advised of oil spill response strategy and general operations.
23. Subject to paragraphs 24 to 29 of this Schedule, AMSA will replace consumable materials used and reimburse the reasonable costs and expenditure incurred by a Statutory or Combat Agency and any assisting agency in the prevention and clean up of marine pollution from ships where the value of the materials and total reasonable costs and expenditure incurred in responding to oil spills during a financial year exceeds \$5000. This figure is to be indexed in accordance with CPI, and will increase by increments of \$1000 at appropriate intervals. Where response costs in respect of a single incident exceed \$5000 and the polluter cannot be identified, AMSA will also reimburse the first \$5000.
24. Costs and expenditure relating to oil and hazardous substances spill monitoring that will be reimbursed by AMSA is restricted to Type 1 monitoring. Type 1 monitoring is defined as the collection of information about the oil and hazardous substances spill, in particular the extent and quantity of contamination and effectiveness of clean-up for the purposes of aiding decision making during shoreline clean-up and on-water operations. Reimbursement of costs and expenditure by AMSA will be limited to those incurred during the incident.
25. For the purpose of paragraph 23 of this Schedule, costs and expenditure which will not be reimbursed by AMSA includes;
 - (i) post spill monitoring (other than Type 1 monitoring referred to in paragraph 24 of this Schedule) and environmental impact assessment;
 - (ii) the cost of patrol, search and surveillance or other activities not directly related to a particular incident, actual or reported;
 - (iii) a payment, other than the premium for insurance directly relevant to persons involved in a particular incident, made pursuant to legislation relating to workers' compensation; or
 - (iv) the payment of compensation or damages for the death or injury to a person or the loss of or damage to property;
 - (v) legal costs associated with action other than recovery of clean up costs.
26. For the purposes of paragraph 23 of this Schedule, the State/NT Statutory Agency will furnish AMSA with a report of every incident which will include details of:
 - (i) the methods used to determine whether the pollution came from a ship source;
 - (ii) the preventative and clean up measures taken; and
 - (iii) the equipment, dispersant and other materials used and costs and expenses incurred.

27. In any case to which paragraph 23 of this Schedule is applicable, and to the extent it is practicable to do so, the State/NT Statutory Agencies will take such steps as are available to them, including the institution of criminal or civil proceedings, for recovery from the owner or the master of the ship which caused the oil and/or chemical pollution of the costs and expenses incurred in the preventative and clean up measures (including costs and expenses incurred by a Statutory Agency on its behalf or an assisting agency). Hire charges for National Plan equipment should be in accordance with the rates advised by AMSA as updated from time to time. Any amount recovered by a State/NT Statutory Agency pursuant to this paragraph will be deducted from the amount payable by AMSA to that agency pursuant to this paragraph or, if the agency has already been paid the full amount of such costs and expenses, the agency will pay the amount it has recovered to AMSA.
28. State/NT Statutory Agency will use best endeavours to recover all reasonable costs incurred in responding to an incident in its jurisdiction. AMSA will assist the State/NT by providing advice on making claims, format etc. AMSA will be responsible for recovery of all costs incurred in assisting the State/NT to respond to the spill. This includes, but is not limited to, all AMSA direct costs and the costs of any assistance provided or arranged by AMSA under National Plan arrangements such as transport of National Plan, industry or overseas equipment and the provision of National Response Team, or overseas personnel involved in the response. Unless an agreement is reached with the shipowner and the insurer in respect of a specific incident, all accounts will be lodged with the shipowner.
29. Where the costs of clean up for any one incident exceed \$20,000, the responsible Statutory Agency may seek reimbursement from AMSA for analysis of oil and chemical spill samples and legal costs not otherwise recoverable which have been incurred in the effort to recover clean up costs. On receipt of documented claims AMSA will meet these reimbursement costs. This does not include legal costs incurred in mounting a prosecution, which will be the responsibility of the appropriate State/NT or Commonwealth Government depending on jurisdiction of the area of the spill.

Training

30. Training will be conducted by National Plan stakeholders at three levels:
- Level 3 - senior government and industry personnel responsible for high level decision making in the management of oil or chemical spill incidents;
 - Level 2 - middle management personnel responsible for managing the operational response, eg incident controllers, their deputies and environment and scientific coordinators, and Fire Brigade (Hazardous Materials) specialists;
 - Level 1 - operator level personnel, i.e. those undertaking on-site clean-up operations. In a major incident this would also include supervisors appointed as site managers.
31. The National Plan training program will be developed and overseen by the National Plan Operations Group.
32. AMSA will meet the reasonable cost of airfares and course fees for State/NT Statutory Agency nominees to attend courses run by AMSA as part of the training program.

SCHEDULE 2

Funding Arrangements

Australian Maritime Safety Authority

1. The Australian Maritime Safety Authority (AMSA) is largely self-funded through levies on the commercial shipping industry. AMSA will manage the National Plan against a four-year rolling budget developed and maintained by the National Plan Management Committee and submitted for advice each year to the Australian Transport Council. AMSA will provide for a range of programs to support National Plan activities, as set out in paragraphs 3 to 14 below.

Administration of the National Plan by AMSA

2. AMSA will meet the administrative costs associated with management of the National Plan. This includes AMSA staffing costs, travel and transport, communications expenses, and depreciation.

Equipment

3. AMSA will purchase equipment for incident response, in accordance with a four year rolling oil spill response capital program developed by the National Plan Operations Group. This equipment will not include first strike equipment for offshore petroleum operations, terminals and ports.
4. AMSA will develop and implement an annual equipment maintenance program and pay reasonable storage costs for equipment held by AMSA in central and regional stockpiles.
5. AMSA will develop and implement an annual equipment audit program for equipment held by AMSA in central and regional stockpiles, or held on long term loan by the States/NT.
6. AMSA will maintain the Marine Oil Spill Equipment System (MOSES) that provides information on equipment held by AMSA, States/NT and industry.

Training

7. AMSA will fund and coordinate the AMSA Oil Spill Management Courses (Level 2 course) and State Marine Pollution Controller Courses (Level 3 course) to meet the requirements of the National Plan.

National Plan Biennial Exercise

8. AMSA will provide funding assistance to facilitate the development and delivery of a major biennial exercise by AMSA, States/NT and industry to test response plans, procedures and arrangements. Such assistance will be determined on a case-by-case basis in consultation with the National Plan Operations Group.

Fixed Wing Aerial Dispersant Capability (FWADC)

9. AMSA will manage the operational delivery of the national fixed wing aerial dispersant capability and the administrative functions associated in maintaining the capability.

Dispersants

10. AMSA will develop, maintain and fund a rolling program to provide for the purchase and storage of oil spill dispersants for Tier 2 and 3 incidents.

Incident Cost Recovery

11. AMSA will replace consumable materials used and reimburse the costs and expenditure incurred by a State/NT Statutory or Combat Agency and any assisting agency in the prevention and clean up of marine pollution from ships, in accordance with Schedule 1 to this Agreement.

Research and Development

12. AMSA will fund research and development projects agreed by the National Plan Operations Group and approved by the National Plan Management Committee.

Oil Spill Response Atlas (OSRA)

13. AMSA will manage the OSRA program and provide annual funding to allow the State/NT to ensure existing data remains current and to add additional data as necessary, as specified in the Oil Spill Response Atlas strategy agreed by the National Plan Operations Group.

Oil Spill Trajectory Model (OSTM)

14. AMSA will manage and provide annual funding for the OSTM program.

States/NT

15. The States/NT will maintain and administer State/NT contingency plans, in accordance with obligations set out in this agreement, and provide a range of programs to support National Plan activities, as set out in paragraphs 16 to 21 below.

Equipment

16. States/NT will administer an appropriate preparedness and response capacity at oil/chemical terminals, offshore drilling rigs/platforms and ports within their jurisdiction in accordance with paragraphs 15 to 17 of Schedule 1 to this Agreement. This will include appropriate arrangements for equipment maintenance and audits. States/NT will give due regard to principles developed by the National Plan Operations Group.
17. States/NT will provide regular updates of equipment held by the State/NT to AMSA to ensure the Marine Oil Spill Equipment System (MOSES) is accurate.

Training

18. States/NT will be responsible for the delivery of Equipment Operator Courses (Level 1 Course), Shoreline Cleanup Courses and Oil Spill Administration Courses to meet the requirements of the State/NT.

Exercises

19. States/NT will provide funding and personnel as appropriate to assist in the development and delivery of a major biennial exercise by AMSA, State/NT and industry to test response plans, procedures and arrangements. AMSA will reimburse the costs of the airfares of States/NT personnel who are involved in the planning and umpiring of a biennial exercise.
20. States/NT will arrange, conduct and bear the cost of exercises required by the NT/State Statutory Agencies.

Oil Spill Response Atlas

21. States/NT will ensure existing OSRA data remains current and carry out the functions specified in the strategy endorsed by the National Plan Operations Group.

APPENDIX 2

Key Contact Information



APPENDIX 3

MOSES

OVERVIEW

The Marine Oil Spill Equipment System (MOSES) is a system to make accessible and manage operational and technical information about National Plan assets. It is also used to manage audit, maintenance and repair of equipment.

MOSES is based on the MAXIMO application licensed from PSDI Inc.

MOSES enables users to create, modify and track asset information, collect and report the cost of incidents and other work, plan and schedule equipment audits and maintenance, standardise the procedures used to perform this work, and track location, stock levels and suppliers of spare parts.

EQUIPMENT

The equipment of the National Plan is listed in the MOSES Data Base. An example of the detail of the information required so that the data base can be correctly listed is shown below on the actual MOSES Equipment screen.

The screenshot shows the MOSES Equipment - [Main] window. The interface includes a menu bar (File, Edit, View, Options, Table, Database, Select, Window, Help) and a toolbar with icons for Save, Insert, Clear, Prev, Next, O-view, Return, RefSel, Screens, Menu, Main, Submain, PMs, Eq Spec, Docs, and Drilldown. The main data entry area contains the following fields:

Equipment	WCF-4270	VESSEL - OIL RECOVERY - MARCO CLASS 1
Quantity		Registration No
Part of	AMSA	AUSTRALIAN MARITIME SAFETY AUTHORITY
Location	NP0735	WHYTE IS - PORT OF BRISBANE CORP - MARINE OPS BASE
Owner	AMSA	AMSA
Custodian	QLD11	Port of Brisbane Corporation
Part Number		
Serial Number		Model Number

Below the main data entry area are three sections: Details, Financial, and Purchase Information.

Details	Financial	Purchase Information
Group: NATPLAN	Total Cost: \$0.00	Date entered:
Failure Class:	YTD Cost: \$0.00	Service:
Mandatory Inspection?: <input type="checkbox"/>	Inventory: \$0.00	Owned By:
Material Handling?: <input type="checkbox"/>	Asset Class: WCF	Warranty Date:
Mobile?: <input type="checkbox"/>		Modified:
Calendar:		Modified By: SPW
		Date: 7/10/1997 11:3

At the bottom of the window, there is a 'BROWSE' button, an information icon, the text 'First record retrieved.', and a status bar with 'ABC' and a green checkmark icon.

As a result of the information stored AMSA can produce an Excel spreadsheet that lists all the equipment, location of storage, Contact Officer and owner. A section of this report is undernoted to provide a brief description of an output.

	A	B	C	D	E	F
1						
2	MOSES I	DESCRIPTION	QTY	STATUS	LOCATION	OWNER
3	PFA10622	RADIO - TRANSCEIVER VHF - ICOM IC6M1500		ACT	OFFICE CANBERRA	AMSA
4	PFA10623	RADIO - TRANSCEIVER VHF - ICOM IC6M1500		ACT	OFFICE CANBERRA	AMSA
5	PFA10625	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
6	PFA10624	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
7	PFA10628	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
8	PDM10722	TRACKER - SATELLITE TYPE WITH FLASHING LIGHT		ACT	OFFICE CANBERRA	AMSA
9	PFA10909	GPS RECEIVER - ENSIGN XL		ACT	OFFICE CANBERRA	AMSA
10	PDM10875	TRACKER - SATELLITE TYPE WITH FLASHING LIGHT		ACT	OFFICE CANBERRA	AMSA
11	PFA16585	RADIO - TRANSCEIVER - SATCOM - ATLAS SP1500		ACT	OFFICE CANBERRA	AMSA
12	PAG10877	INSTRUMENT - GAS DETECTOR - DRAGON		ACT	OFFICE CANBERRA	AMSA
13	PEA11337	GENERATOR SET - PORTABLE 88KVA		ACT	OFFICE CANBERRA	AMSA
14	PAC11337	GENERATOR SET - PORTABLE 88KVA		ACT	OFFICE CANBERRA	AMSA
15	UNK-0012	GENERATOR SET - PORTABLE 88KVA		ACT	OFFICE CANBERRA	AMSA
16	UNK-0010	RADIO - TRANSCEIVER VHF - ICOM ICA20		ACT	OFFICE CANBERRA	AMSA
17	UNK-0009	RADIO - TRANSCEIVER VHF - ICOM ICA20		ACT	OFFICE CANBERRA	AMSA
18	PFA10940	GPS RECEIVER - ENSIGN XL		ACT	OFFICE CANBERRA	AMSA
19	PFA10938	GPS RECEIVER - TRANSPAK II		ACT	OFFICE CANBERRA	AMSA
20	PFA10629	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
21	PFA10627	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
22	PFA10626	RADIO - TRANSCEIVER UHF - ICOM10A - HEADSET WITH VOX		ACT	OFFICE CANBERRA	AMSA
23	PCD-5006	SKIMMER - ROPE MOP - CM 140		NSW	NEWCASTLE PORTS CO	AMSA
24	VCA-5005	TRAILER - BOX TANDEM AXLE		NSW	NEWCASTLE PORTS CO	AMSA

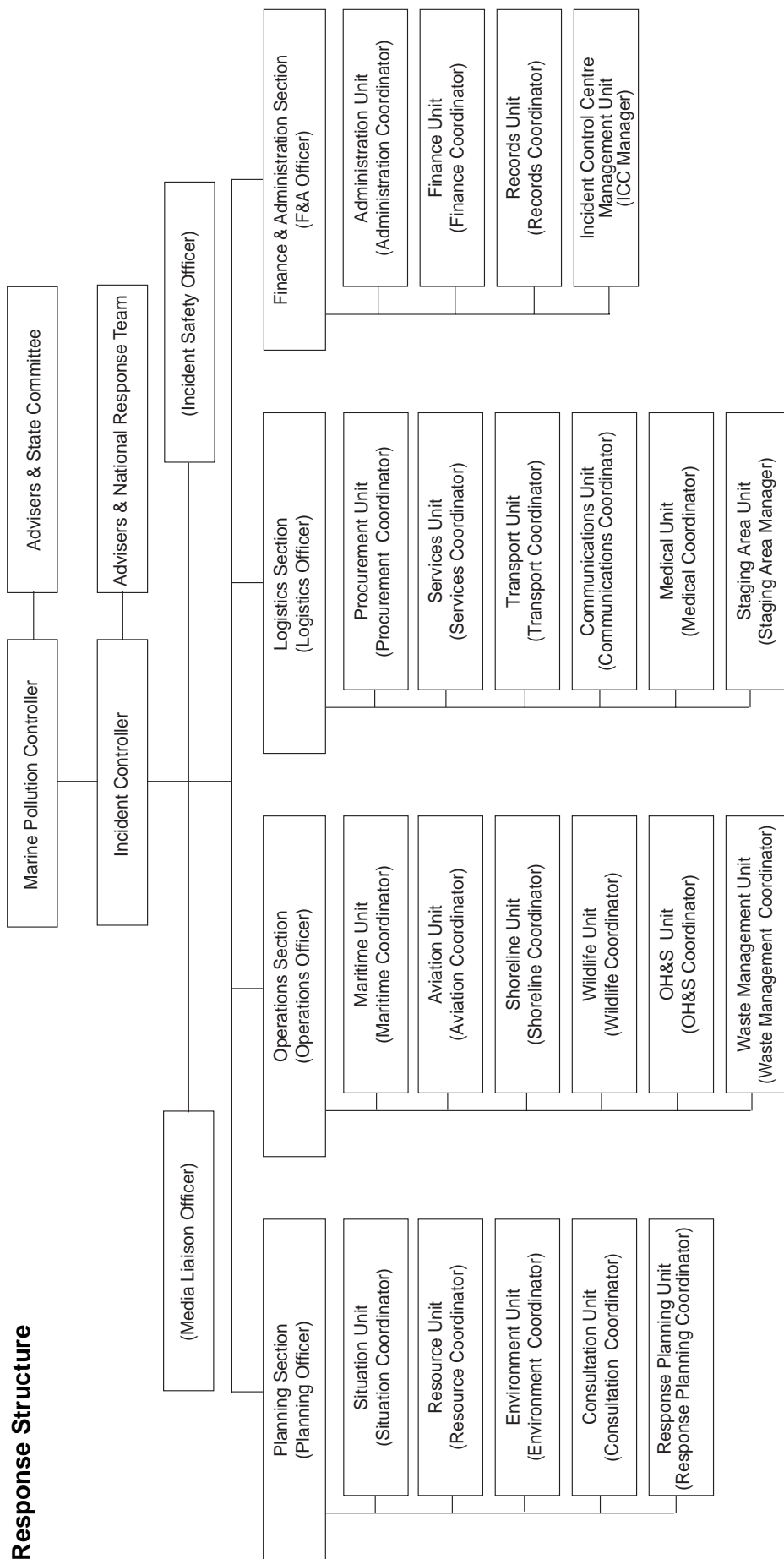
Copies of MOSES outputs are available from EPG, AMSA. Alterations to equipment details (locations, contact details, new equipment, etc,) should be forwarded to EPG, AMSA, for amendment to MOSES.

APPENDIX 4

RESPONSE STRUCTURE

OSRICS

Response Structure



Typical response structure

For further details refer to State, Regional and Local contingency plans.

APPENDIX 5

POLREP FORMAT

MARINE POLLUTION INCIDENT REPORT (POLREP)

This is the initial advice from the Combat Agency of actual or threatened pollution.

Key is early dispatch of the POLREP, rather than waiting for details of information specified.

Completed form is transmitted to all relevant agencies including:

- *Statutory Agency*
- *AMSA Rescue Coordination Centre.*

Date/Time of Report				Ref. No.	
Date/Time of Incident					
Location of Incident					
	Latitude		Longitude		
Original Report Source	Name				
	Position				
	Contact	Address			
		Telephone			
		Fax			
Mobile					
Nature of the Incident & Spill Source					
Cause of Discharge					
Status of Discharge					
Oil Type or Description					
Identity & Position of Adjacent Vessels (if source unknown)					
Nature & Extent of Pollution					
Rate & Direction of Movement					

CONTINUES ON PAGE 2

POLREP PAGE 2

Weather/ Sea/ Tide Conditions			
Combat Agency			
Incident Controller	Name		
	Contact:	Telephone	
		Fax	
		Mobile	
Statutory Agency			
Initial Response Actions			
Samples Taken? Yes/No			
Images Taken? Yes/No	Photographs: Yes/No	Video: Yes/No	
Additional Information			
POLREP Prepared By	Name		
	Agency		
	Role		
	Contact	Telephone	
		Fax	
		Mobile	
Attachments ?	No of Pages Attached:		

HARMFUL SUBSTANCES REPORT

(Sections of the ship reporting format which are inappropriate should be omitted from the report)

This report is for use when reporting discharge or potential discharge of oil or noxious liquid substance carried in bulk

- A Ship name, callsign/ ship station identity and flag
- B Date and time of event
(Note: time must be expressed as Universal Co-ordinated time)
- C Position: latitude and longitude; or
- D Position: true bearing and distance
- E True course
- F Speed in knots and tenths of knots
- L Route information/intended track
- M Radio communications: full names of stations (including INMARSAT)
- N Time of next report
(Note: Time must be expressed as Universal Coordinated time)
- P**
 1. Type of oil or the correct technical name of the noxious liquid substances on board
 2. UN number or numbers
 3. Pollution category (A,B,C or D) for each noxious liquid substance** (Note: In the case of a probable discharge, item P should be included)
- Q
 1. Condition of ship, as relevant
 2. Ability to transfer cargo/ballast/fuel
- R
 1. Type of oil or the correct technical name of the noxious liquid substance discharged into the sea
 2. UN number or numbers
 3. Pollution category (A,B,C, or D) for each noxious liquid substance
 4. Names of manufacturers of substances or consignee or consignor
 5. An estimate of the quantity of each substance
 6. Whether lost substances floated or sank
 7. Whether loss is continuing
 8. Cause of loss
 9. Estimate of the movement of the discharge or lost substances giving current conditions, if known
 10. Estimate of the surface area of the spill
- S Weather conditions (give brief details of weather and sea conditions prevailing)
- T Name, address, telex and telephone numbers of the ship's owner and representative
- U Ship size and type
- X
 1. Action being taken with regard to the discharge and to the movement of the ship
 2. Assistance or salvage efforts which have been requested or to which have been provided by others
 3. The master of an assisting or salvaging ship should report the particulars of the action undertaken or planned

APPENDIX 6

SITREP FORMAT

MARINE POLLUTION SITUATION REPORT (SITREP)

*This is advice from the Combat Agency of the current status of the incident and the response.
This form is transmitted to all relevant agencies including:*

- Statutory Agency
- Chair, State Committee
- General Manager Maritime Operations, AMSA

			Ref. No.	
Priority	Urgent <input type="checkbox"/>	Immediate <input type="checkbox"/>	Standard <input type="checkbox"/>	
Final SITREP?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Next SITREP on:	
Date/Time				
POLREP Reference				
Incident	Name			
	Latitude		Longitude	
Brief Description of Incident and Impact				
Overall Weather conditions				
Summary of Response Actions to Date				
Current Strategies				

CONTINUES ON PAGE 2

SITREP PAGE 2

Summary of Resources Available/Deployed			
Expected Developments			
Other information			
SITREP Prepared By	Name		
	Agency		
	Role		
	Contact	Telephone	
		Fax	
		Mobile	
Attachments ?	No of Pages Attached:		

APPENDIX 7

SAMPLING PROCEDURES

SAMPLING PROCEDURES

Collection of Samples

Samples of oil should be taken from potential sources and from the water/ foreshore areas with the minimum of delay so that changes in composition due to weathering are kept to a minimum.

Every effort should be made to obtain a representative sample of the pollutant and ships tanks for comparison purposes, particularly if prosecution is envisaged. It should be noted that it is particularly difficult and expensive to prove source connection without comparative source samples.

Continuity of Samples

To be admissible as evidence, samples taken must be proved conclusively to be in an appropriate person's possession until delivery to the laboratory undertaking the analyses. This requires that rigid controls be instituted and maintained to establish continuity for the samples from the time of initial sampling.

Delivery of Samples

Where samples are collected for the purpose of prosecution appropriate safeguards need to be ensured during their transport. AMSA has identified that TNT Failsafe Couriers can provide transport of samples from the person responsible for its collection and/or custody to the designated analyst, incorporating rigid controls and security.

Transport of samples is organised for all State/NT locations by the TNT Failsafe's Sydney office. TNT Failsafe contact details are available from EPG, AMSA.

Analysis of Samples

AMSA has arrangements in place whereby designated analysts appointed under the provisions of the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* will carry out testing of all samples for the purposes of Commonwealth prosecutions under that Act.

Further Details

Further details concerning sampling procedures and appointed analysts are available from EPG, AMSA.

APPENDIX 8

OSTM ACTIVATION PROFORMA



OIL SPILL TRAJECTORY MODELLING (OSTM) REQUEST

Email completed form to: OSTM@amsa.gov.au
 or Fax to: 02 6279 5026 (bh) 02 6230 6868 (ah)
 After sending the request phone 02 6279 5680 (bh)
 If after hours, phone the AMSA Rescue Coordination Centre (AusSAR) on 02 6230 6811 or 1800 641 792

Priority of request Urgent Routine Exercise

Vessel/spill/exercise name or identifier		
Name of requesting organisation		Name of requesting person and position in response
Contact telephone number	Email address for model output (preferred method)	Fax number for receipt of model output

Format of coordinates used (select one)	Latitude of spill	Longitude of spill
Degrees & decimal degrees	°	°
Degrees, minutes & decimal minutes	° ' "	° ' "
Degrees, minutes & seconds	° ' "	° ' "

Spill start date (eg 23 08 2000) Day Month Year	Spill start time (spill site local time, 24 hour clock)	Local time used eg EST, CST, WST, GMT, daylight saving etc
--	--	---

Type of oil spilt or likely to be spilt eg Name: crude oil / Type: fuel oil / Grade: bunker fuel

Name	Type	Grade
------	------	-------

Amount of oil spilt or likely to be spilt (complete one option)

If exact spill quantity is unknown for modelling purposes provide a maximum quantity of spill

Tonnes
 Cubic metres
 Litres
 Barrels

Known or estimated amount of time oil was being discharged hours

How long do you want the model prediction for Hours (eg 12, 24, 36 hrs)

Surface water temperature at spill site °C (if not available AMSA will use an average for this location)

Wind speed and direction at spill location is vital to the effectiveness of the spill simulation model

Wind speed and direction

Note: If wind speed and direction are variable use page 2 to input data

DISCLAIMER

Any Oil Spill Trajectory Modelling predictions are for the exclusive use of the client and not for third party use. The oil spill trajectory predictions, opinions and interpretations contained in predictions are based on observations and data supplied by the client and information sources available to AMSA.
 The computer model predictions, interpretations or opinions expressed represent the best judgement of the Environment Protection Standards, Maritime Safety and Environmental Strategy, Australian Maritime Safety Authority (AMSA). AMSA and its personnel or advisers, assume no responsibility and make no warranty or representations as to the accuracy or reliability of the predictions. It should be noted that accuracy of predictions may be adversely affected where modelling is carried out in respect of spills in enclosed waters, estuaries, close to shore, or when only low resolution maps are available.
 The use and mention of any specialist software or equipment in any prediction does not represent endorsement of these products by AMSA.

Copies of this form can be obtained at: www.amsa.gov.au/me/natplan/toolbox/ostm/proforma.htm



APPENDIX 9
VESSEL CHARTER AGREEMENT

AUSTRALIAN MARITIME SAFETY AUTHORITY CHARTER AGREEMENT

IT IS MUTUALLY AGREED between the owner and the Australian Maritime Safety Authority that the owner will let and the Australian Maritime Safety Authority will take the vessel for the period of hire at the agreed rate for the purpose of combating pollution of the sea by oil within such parts of the area of operations as the Australian Maritime Safety Authority representative may direct on the following conditions namely:

- (1) Prior to the commencement of hire, the owner and the skipper of the vessel shall perform and observe all laws relating to the servicing operation and certification of the vessel.
- (2) The owner will place the vessel in a seaworthy condition manned in accordance with all relevant legal requirements at the disposal of the Australian Maritime Safety Authority at the specified port at the commencement of hire.
- (3) The owner will pay the wages of the crew during the hiring and, subject to condition 7, will bear the cost of maintenance and other outgoings arising out of the hiring other than the cost of fuel which shall be borne by the Australian Maritime Safety Authority.
- (4) The skipper will be responsible for the safe navigation of the vessel and will be the sole judge as to whether it is prudent to put to sea or remain at sea at any given time having regard to the state of the weather and the surrounding circumstances.
- (5) Subject to condition 4 the skipper and crew will obey all reasonable orders of the Australian Maritime Safety Authority representative including orders relating to:
 - (a) the carriage of persons other than the crew on board the vessel;
 - (b) the fitting to the vessel of anti-pollution equipment supplied by the Australian Maritime Safety Authority;
 - (c) the carriage, operation and use of anti-pollution equipment and materials on board the vessel; and
 - (d) the voyages and tasks to be undertaken by the vessel.
- (6) Time lost through any defect in the vessel or its equipment or any unreasonable act or omission of the owner, skipper or crew will be deducted from the period of hire.
- (7) The Australian Maritime Safety Authority shall, with respect to matters arising from the use of the vessel for the purpose of this Agreement:
 - (a) to the extent that the owner is not otherwise covered by insurance, indemnify the owner against all actions claims and demands, other than those for or relating to workers' compensation, for which the owner shall be liable on account of death of or injury to any person or the loss of or damage to any property; and
 - (b) to the extent that the owner is not otherwise covered by insurance, compensate the owner for loss of or damage to the vessel including pollution damage and for loss of the value of fish which are aboard the vessel at the commencement of hire.
- (8) The hiring may be terminated by the Australian Maritime Safety Authority representative, or by the owner, at any time upon either of them giving 24 hours' notice in writing to the other.
- (9) Any notice which the owner may desire to give to the Australian Government under this agreement may be given by the owner or skipper to the Australian Maritime Safety Authority representative and any notice which the Australian Maritime Safety Authority may wish to give the owner under this agreement may be given by the Australian Government representative to the owner or skipper.
- (10) In the agreement the expressions set out in Column 1 of the Schedule shall have the meanings respectively set out opposite to them in Column 2 of the Schedule.

THE SCHEDULE

COLUMN 1

COLUMN 2

Vessel

Owner

Skipper

Specified Port

Area of Operations

within a radius of nautical miles from

Commencement of Hire

..... am on/...../.....

..... PM on/...../.....

Period of Hire

..... days of 24 hours

Agreed Rate

\$..... a day and

proportionately

for and part of

\$..... a day

Australian Maritime Safety
Authority Representative

The person signing this agreement on behalf of the Australian Maritime Safety Authority or any person nominated by him to be the Australian Maritime Safety Authority representative for the purpose of this agreement.

Date thisday of.....20..

.....
Owner

.....
Australian Maritime Safety Authority

APPENDIX 10

ESTIMATION OF QUANTITY OF OIL

APPEARANCE OF OIL ON WATER

Relation between appearance, thickness and volume

Figure No.	Oil type	Appearance	Approx thickness (mm)	Approx volume (m ³ /km ²)
1	Oil sheen	silvery	>0.0001	0.1
2	Oil sheen	iridescent (colours)	>0.0003	0.3
3	Crude/fuel oil	black/dark brown	>0.1	100
4	Water-in-oil emulsions ("mousse")	Brown/orange	>1.0	1000

Reference - International Tanker Owners Pollution Federation Limited - Technical Information Paper



Figure 1



Figure 2



Figure 3



Figure 4